





★ CALIFORNIANA *oversize*

MAIN LIBRARY

SAN FRANCISCO PUBLIC LIBRARY



3 1223 04552 3256



F917.94 R312<sup>13</sup> 68455

NOT TO BE TAKEN FROM THE LIBRARY

Form 3427



























917.94  
R312-13  
68455

# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, JANUARY, 1883.

ESTABLISHED, 1870.  
Office—320 Sansome St., Hilleck Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM!**  
**Six Months, \$1.25—Postage Paid.**  
**SINGLE COPIES, 25 CENTS.**  
**ISSUED MONTHLY.**

way to gain a correct knowledge of California, and that is by personal observation and careful study. As we have traveled continually, for several years, and visited every section of California, in the interest of this journal, we will endeavor to give a correct description, in the following article:

By looking over the map of the world, we find California situated on the Pacific Ocean, between lat. 32 degs. 20 min. and 42 degs. north, and lon. 114 degs. 20 min. and 124 degs. 25 min. west. It is bounded on the north by Oregon; east by Nevada and Arizona, following the Sierra Nevada Mount-

ugged, its summit being generally above the region of perpetual snow, and has but few of those very elevated passes. It is 560 miles long and 80 miles wide, with an altitude varying from 3,000 to 16,000 feet. Nearly its whole width is occupied with its western slope, which descends to a level of 300 feet above the ocean, while the eastern slope is only five or six miles wide, and terminates in the great basin, which is from 4,000 to 5,000 feet above the sea level. The Coast Range, as its name indicates, runs along the coast. This range averages from 2,000 to 4,000 feet in height. Be-

which extends northwest towards Mount Shasta. The plateau is an independent basin; its waters do not leave it, but flow into a chain of lakes located in the extreme north-east corner of the State.

The great basin of Utah, a mountainous, barren tract of land, having an elevation of 4,000 to 5,000 feet, with no outlet for its waters, extends into the south-east portion of California. This region is exceedingly arid and sterile, and is cut up by numerous irregular ridges of bare, rocky mountains, with intervening valleys of sand and volcanic matter. On the south-east border is a district about 140 miles



BIRD'S EYE VIEW OF SAN FRANCISCO.

**CALIFORNIA.**  
**General Outlines and Physical Features—Mountains, Valleys and Natural Wonders.**  
**Agriculture—Horticulture—Timber and Mineral Lands—Soil and Climate.**  
**Railroads—Commerce and Manufactures—Resources and Advantages.**  
**Population—Present and Future Prospects.**  
*[By the Traveling Agent of THE RESOURCES.]*  
A great deal has been written about California, for the past 35 years, ever since the discovery of gold, on the 19th day of January, 1848. No other country, on the face of the globe, has had such a notoriety as California possesses. A great deal has been said, by parties almost wholly unacquainted with this wonderful country, which, of course, is unreliable information. In fact, there is but one

min on the line of lon. 120 degs. west to lat. 39 degs., thence south-east to the Colorado river, on the 35th parallel, and thence by the course of that river; south by the Mexican Territory of Lower California; and west by the Pacific Ocean. The outlines of this State are very irregular. Its general direction lengthwise, is north-west and south-east, and a line drawn through the center, following the curves of its eastern and western boundaries would measure about 770 miles. The greatest breadth is about 320 miles, least breadth, 150 miles, and the average is about 230 miles. In size it is the second State in the Union, its area being 158,366 square miles. In 1880 it had a population of 780,577, exclusive of Chinese and Indians. Geographically it is divided into 52 counties.

The most striking feature in its physical geography is the existence of two great ranges of mountains, running north-east and south-west, and generally parallel, called the Sierra Nevada and the Coast Range. The Sierra Nevada is the most lofty and

tween the Sierra Nevada and the Coast Range lies **The Great Basin.** Bearing the double name of the Sacramento and San Joaquin valleys, although really but one geographical formation. This valley extends north, and south, about 100 miles, with an average breadth of from 50 to 60 miles, and presents evidences of once being a vast lake. It is drained, from the north, by the Sacramento, the largest river in the State, and from the south, by the San Joaquin, the longest river in California, which, after meeting and uniting in the center of the basin, break through the Coast Range. Along the great rivers the valleys are generally low, level, and extremely fertile, rising into undulating slopes and low hills as the mountains are approached on either side, and broken on the east by numerous spurs from the Sierra. At the north end, between lat. 40 degs. and 42 degs., is a high table-land or plateau, about 110 miles long, and 5,000 feet above sea level, lying between the main chain of the Sierra Nevada, and a branch

long by 50 miles wide, which belongs to the Colorado basin, and is known as the Mohave desert. The Coast Range is divided, in its length, by long, narrow, fertile valleys.

Of the total area of the State, one-fifth is desert, and two-fifths are mountainous unfit for tillage, but with extensive districts valuable for pastures, timber and minerals, leaving two-fifths susceptible of cultivation—though some portions of it can not be used with profit, until irrigated, protected against overflow by dykes, and drained of its superabundant water, or made accessible by railroad. The State has 100,222,610 acres, including 43,432,622 acres of unsurveyed public lands, and 57,500,018 acres of surveyed public lands. The surveyed lands include 8,000,000 acres of private grants and 1,500,000 acres of swampy lands.

California has a population of less than 800,000 persons, scattered over a territory larger than England, Ireland, Scotland and Wales, yet the total annual production of the mines, farms, manufac-



trees, vineyards and orchards, carried on by these persons, amount to over \$150,000,000. The people have nearly \$150,000,000 in savings and other banks, and various corporations pay dividends of about \$30,000,000. The yearly sales of real estate amount to \$65,000,000. The coinage of the mint, in San Francisco, is \$50,000,000. The grand total value of the precious metals of the coast amounts to more than \$80,000,000 annually, principally centered in San Francisco.

Forty-three years ago, there were but a few mission gardens and small bands of cattle and horses here; thirty-three years ago the pioneer miners had begun their work with pan and pick, rocker and long-tom; twenty-eight years ago, a few men, called enthusiasts by some, crazy by others, began to farm and plant orchards in valleys, and make homes; twenty-three years ago railroad building was commenced, and only twelve years ago vineicultural interests of the State began to develop with energy; and the planting of orchards received an impetus which has continued with accelerated speed ever since. These few people have made California the first State in the Union in wheat, barley, wine, wool, gold, fruit and quicksilver; and California is, to-day, the fourth State in the Union, according to population, in her manufacturing industries.

#### Commerce.

Among the primary and fundamental claims which California has upon the attention of home-seekers, her commercial situation may be mentioned. The communities, which are near the sea shore, have advantages over those farther inland, as they thus obtain healthy competition in carrying their products. There is no reason to doubt that the same growth which has built up such prosperous cities as Boston, New York, and other cities along the Atlantic shores, is in full operation here. The commerce of the Pacific, and of the west coasts of South America, Mexico and Central America are centering here. The great nation, of which we are a part, must draw its share of the precious commerce of the Orient through these gates. Whatever dominions wide-reaching and powerful, is yet reserved for the English-speaking race in the sweep of the Pacific, and about its coasts, no student of the earth's surface can fail to believe that the largest portion will be in the hands of Pacific Coast men, from Alaska to Mexico. The commercial center of this territory is about the bay of San Francisco. Here, is the harbor, the best location, the many beginnings, the associated capital. Other cities will spring up along the northern and southern coast, win commercial place and make rich men by the score; but here is the metropolis, which, if the men of California are true to themselves, and rightly use their advantages, may some day be greater than London, more keenly alive than Paris more picturesque than Venice, more crowded with temples and works of art than was Rome in her palmiest days.

#### Soil and Climate.

The second great advantage which this coast presents is its variety of soil and climate; hence its production. The climate of California, in different parts, varies greatly, irrespective of the great range of latitude 9½ degs., through which the State extends. It differs widely from that of the Atlantic slope, in the same latitude, and probably from that of any other country in the world. Properly speaking, California has several climates, the basin of the Sacramento and San Joaquin having one, the western slope of the Coast Range, north of latitude 35 degs another, and the portion of the State south of 35 degs. still another. The climate west of the Coast Range is different from that east of the same range, which is less than 60 miles in width. At San Francisco the mercury seldom rises above 80 degs. in the dry, or falls below 40 degs., in the wet season. Snow seldom falls here, and the winters bear a strong resemblance to the Indian summer of the Mississippi valley. It is doubtful if any other country in the world has such cool summers and warm winters. The coolness of the summer nights is attributed to the extreme clearness of the atmosphere favoring radiation. The wind blows for a part of each day from the north and north-west along the Coast, nearly the whole year. In the interior the extremes are much greater, the mercury in the Sacramento valley often rising in summer to 110 degs., and along the south-eastern line of the State as high as 140 degs.; but, owing to the extreme dryness of the atmosphere, this great heat is not prostrating, as on the Atlantic slope, the nights being cool and refreshing. The climates of central California may be grouped into coast climate, climate of the interior, and climate of the Sierra slope. The first has a small range of temperature, and some fog and sea breeze. The second has a greater summer temperature than on the coast, a dry, northerly wind at times, and no fog. On the Sierra slope, also northward in the Coast Range, the climate, as we ascend, approaches more and more to that of New England, until we reach the snow line. In many counties, 30 miles

travel takes one from where oranges grow to where only the hardy fruit-trees prosper. The general features of these three climates, of which we have spoken, mingled, or are interchanged, according as the valleys open toward the sea, or away from it, or slope northward or south. In every county in the State, except a few along the upper Sierras, the entire range of temperate zone, fruits, grains, and other products, together with many of the semi-tropical fruits can be grown with ease. Specimens of wild plants of the entire Atlantic Coast, from Maine to Florida, with the flora of Japan, China and the Himalaya region, can easily be made to thrive in an arboretum, in California. Australia contributes largely to our gardens, and Mexican, Chilean, and Peruvian plants find congenial homes in California soil. The horticulture of the future will be one of surprising variety, as the horticulturist becomes better acquainted with the soil, which is of all sorts and characters.

#### Seasons.

California has a rainy and a dry season, the former nearly corresponding to the winter, and the

many parts of California where the rainfall is not more than from 10 to 12 inches, on an average, and when it falls below this, artificial irrigation is usually needed. From Goshen to Caliente, 100 miles along the upper San Joaquin valley, the rainfall is too slight to secure crops in ordinary seasons, but the adjacent Sierras contain a catchment area of 4,000 square miles, with an average precipitation of over 50 inches. In this portion of State, large tracts of land are situated as to be well irrigated at slight cost. The upper half of California has sufficient rain for the production of all kinds of crops, except fruit and grapes in the Sacramento valley. No irrigation is required in the valleys of the Coast Range. A marked phenomena of the climate is the comparative absence of thunder and lightning. During autumn many of the rivers sink in the sand soon after leaving the mountains in which they rise. Vegetation dries up during the long, dry season. The soil, climate, timber, cereals, fruits, and vegetables will be more specially noticed in the different county descriptions.



SCENE IN THE SIERRAS.

#### Natural Wonders.

First among the natural curiosities of California is the valley of the Yo Semite, with its surrounding cascades and mountain peaks. It is situated in Mariposa county, on the west slope of the Sierras, midway between its east and west base, at an elevation of 4,000 feet. It is 143 miles, in a direct line, a little south of east, from San Francisco, but about 260 miles by any of the travel routes. There, within a space of less than 20 miles long and 10 miles wide, is probably presented more grand and beautiful scenery than is found in any similar area in the world. The valley proper contains about 8,400 acres, one-half of which is meadow land, and the whole is as level as a floor, except at the sides of the mountain walls, where the debris has fallen down. One can not resist the impression that this valley was, at one time, at the same altitude as that of the surrounding mountains, and that by some convulsion of nature the valley had sunk to the distance of about a mile below its original height, leaving perpendicular walls of granite on all sides, that stand up from three-quarters to one mile high. Over the sides of

the rim of the valley, at the depressions, there are waterfalls at various points—eaten in all. The water, from these falls, mainly form the Merced river, which runs through the valley. Some of these falls are wonderful and marvelous in their grandeur, sublimity and magnitude. The falls of Niagara, one of the wonders of the world, are only 163 feet high, while the Yo Semite fall leaps down 1,600 feet at a single bound, where it falls on a rocky platform, perhaps 30 feet wide, then leaps down 600 feet more on to a similar rocky table, from which it makes another clear fall of 431 feet to the rocky debris at the bottom of the valley, making a total of 2,631 feet, which is sixteen times higher than that of Niagara. More wonderful still is the leap of the Sentinel Cascade, about three-quarters of a mile to the front; it has a fall, in a single leap, of 2,275 feet. The eleven distinct waterfalls, in the Yo Semite valley, are tabulated thus: Cataract, 900 feet; Bridal Veil, 630; Yo Semite, 2,644 (first, 1,000; second, 600; third, 434); Vernal, 350; Nevada, 700; South Fork, 600; Royal Arch, 1,000; and Sentinel, 3,000. It is impossible to describe Yo Semite so as to give one who has not seen it even a faint idea of its wonderful, strange and magnificent scenery. In the same section of California are the noted

#### Big Trees.

Of which there are several groves in the State. The most noted is the Big Tree grove in Calaveras county. At an elevation of 4,375 feet above the sea, and within an area of 50 acres, are 103 trees, 20 of which exceed 75 feet in circumference. They were first discovered in 1850. One of these giants has been felled; to accomplish this task pump-boring augurs were used, and the constant toil of five men twenty-five days; but when thus completely severed, two and a half days labor, with various mechanical appliances, were required to throw it from its broad base. This tree was 302 feet high and 95 feet in circumference at the ground, and its annual growth lines show over 3,000 years of life. A house is built on its stump for theatrical and other entertainments. A splendid hotel is kept here in the grove. About seven miles south is what is known as South Grove. The other groves of these giants are one in Mariposa county near the Yo Semite valley. Just south of it, in Tuolumne county, is another, and still farther south, in the eastern part of Merced and Fresno counties another, and farther south still, in Tulare county, among the tallest mountain peaks, is the only place in the known world where this timber is known to exist. The name given to the timber is "Sequoias." It is a species of redwood, or at least it resembles the California redwood somewhat, and to Eastern people I can compare it the nearest to red cedar.

#### Death Valley.

One of the most wonderful and least-known countries on the continent, is situated in south-eastern California, in Inyo county, and lies east of Owen's river valley, a distance of nearly 100 miles. It is reached by trails that stretch across wide mesas of cacti and volcanic remains and over mountains that rise bare and lonely under a sunny and burning sun. This wonderful valley extends for 100 miles north-east and south-west, and is from 30 to 40 miles wide. There is no other landscape that one can look so deeply into the interior of the earth as here, its surface being 280 feet below the level of the ocean. Looking down from the mountain-side, into this deep, wide, vast basin, with its shining bed of soda, salt, and borax, which cover thousands of acres, and gleaze and shimmer in the steady glare of light which pours upon them from a cloudless sky, blazing with the reflection of chemical deposit, left by the receding sea, that here once ebbed and flowed, but where now scarcely a drop of rain falls, surrounded by barren, volcanic mountains, making this indeed one of the most wonderful places for the daring prospector or tourist to enter.

#### Lake Tahoe.

One of the most remarkable bodies of water in the world, lying at an altitude of 6,123 feet above the sea-level, is 23 miles long and 15 wide, in the form of a parallelogram, extending north-east and south-west, partly in California, and partly in Nevada. The greatest depth yet found is 1,800 feet, and the water is so clear that trout can be seen from 80 to 100 feet on its pebbly bottom. Owing to the altitude and the rarity of the atmosphere, the water has little buoyancy, and nothing is ever seen floating on the lake, except the beautiful little steamers and pleasure and fishing boats; the bodies of persons drowned in this lake never rise—are never seen again. Lake Tahoe is the great sanitarium of the Pacific Coast. The mountains around it are from 2,000 to 3,000 feet higher than the lake. Near by, on the line of the C. P. R. R., is

#### Donner Lake.

One of the loveliest lakes in California, and for grand and sublime scenery is unequalled on the coast. Dip north from here, up in Plumas county, is Crystal Lake, which is one of the natural wonders. In the bottom of this lake may be seen large

latter to the summer of the Atlantic region. The rains begin at the north early in autumn, but do not fall in the latitude of San Francisco in any appreciable quantity until about the middle of December, which is the month of greatest rain. The rainy season terminates towards the end of May. June, July, August and September are dry, only 2.5 inches of rain having fallen in these months, collectively, in eighteen years. The average rainfall for, in inches, the seasons and the year, at different localities, is:

PLACES.	Spring.	Summer.	Autumn.	Winter.	Year.
San Francisco.	6.64	.43	3.31	11.33	21.41
Sacramento.	7.01	.00	2.61	12.11	21.73
Thimblebay.	13.61	1.18	4.87	16.03	34.69
Fort Yuma.	6.27	1.36	6.80	6.72	31.15
San Diego.	2.74	0.65	1.21	0.30	16.45

Snow is very rare on the coast and in the valleys, and never remains for many days, except in the Klamath river valley, in the north-west portion of the State. There are many melting towns high up in the mountains where the snow falls to a great depth, and lies till late in the spring. There are



forest trees, standing in hundreds of feet of water, undergoing the process of petrification. The formation of this lake is of modern date, and formed by a mountain sliding into the mouth of the canyon, which is now covered with water from the melting snow of the surrounding mountains. The petrified forest, 75 miles from San Francisco, where portions of nearly 100 distinct trees of great size, prostrate and scattered over a tract three or four miles in extent, are found, some on the surface and others projecting from the mountain side. The silicified trees appear, upon an examination, to have been coniferous. A few miles north bring us to the

Geysers.

One of nature's chemical laboratories, located about 110 miles north-west from San Francisco; it is visited by thousands of tourists, and is reached either via Cloverdale or Callatoga, by rail, thence a short distance, by stage, over a picturesque route. A narrow valley or canyon is filled with flowing hot springs, and the soil is covered with a crust of sulphur, iron-rust and other mineral deposit, and filled with steam from the boiling waters. Through the crevices of the rocks, found all over the surface of the canyon, the steam shoots and

Rail-roads.

California has 23 lines of railroad, amounting to 4,265 miles, nearly all centering in San Francisco. The most important are the Central and Southern Pacific, and the leased lines, reaching through the principal valleys of the State. The S. F. & N. P. C. R. R. traverses the entire length of Sonoma valley. The Oregon Division of the Central Pacific is now being built north to the State line, where it connects with the California and Oregon Railroad, making a through line between San Francisco and Portland, Oregon. Other railroads are being built in various parts of the State, which are noticed in the different county descriptions, together with the ocean and river steamer lines. The physical characteristics of the State, giving the timber, soil, minerals, etc., are classified under the different county descriptions.

ALAMEDA COUNTY.

This county, separated from San Francisco by the bay, which forms the western boundary line of it for a distance of 36 miles, is bounded on the south by Santa Clara, east by San Joaquin, and on the north by Contra Costa county, of which it was a part until March, 1853, when, by an act of legisla-

is well watered by numerous creeks which rise in the upper portion of county and empty into the bay. The principal ones are Alameda, San Lorenzo, San Leandro, San Antonio, Sanol and Temescal. Artesian well water is obtained near the bay; it flows out, while further back, towards the foot-hills, it rises near the surface.

Land has rapidly advanced in price, within the past few years, which is largely due to the fine, genial climate, excellent soil, and close proximity to the largest cities in the State, viz., San Francisco and

Oakland.

The second largest city in California, which has a white population of 35,000, and, as a place of residence, is acknowledged to be surpassed by no other city in the Union. Her location is on the east side of the bay, immediately opposite San Francisco, with which place she is connected by several railroad and ferry lines. Steamers run to nearly every part of the city, besides the eight different lines of street railways leading to Alameda, East Oakland, Berkeley, and Fruitvale. The harbor and railroad improvements, and the building of the seawall and dredging out of the bay by the Government, will make this a great commercial center. By means of

completed, will manufacture iron nails of various kinds, plate iron, etc; the Oakland Iron Works, the agricultural works of Seymour & Babins, the California Brewery Mill, large flouring mills, tanneries, potteries, etc.

The towns of Livermore and Pleasanton are situated in Livermore valley, in a fine agricultural country; while Haywards, San Leandro, Centerville, Alvarado, Newark, and Niles are all situated on the bay side of the mountains. The towns of Alameda, Berkeley, and East Oakland are virtually a part of Oakland. In all the towns of this county are churches of all denominations.

ALPINE COUNTY.

Alphabetically speaking, this is our second county. Alpine is located in the extreme eastern part of California, bordering on the State of Nevada. It was organized under an Act of Legislature of 1863-4 from portions of the counties of El Dorado, Amador, Calaveras, and Mono. The greater portion of the county lies at a very high altitude, reaching from 1,000 to 11,000 feet above the sea-level. It is some 70 miles long, and 40 miles wide, and has an area of 565,000 acres. It is the most sparsely-populated county in California. The census of 1880



VIEW OF BERKELEY, CALIFORNIA.

bisect, while the sulphur and alum crystals gleam in the sunlight. The questionable ground shakes and is hot beneath your feet; the air is thick with vapor which bursts out in a roaring cloud of steam.

California is not without her natural bridges, five of which have been discovered; the largest of these is on a small creek emptying into the Hay fork of Trinity river, and is 80 feet long, with its top 170 feet above the water. In Siskiyou county there are two, each 90 feet long, and on Cayote creek, in Tuolumne county, there are also two, the largest being 285 feet long. Numerous caves are found in nearly every mountain county of the State; perhaps the most noted is Alabaster cave in Placer county, containing two chambers, the largest being 200x100 feet. The Bower cave, in Mariposa county, has a chamber 100 feet square. Cripple caves, in Calaveras county, are among the most beautiful sights in the State. Remarkable mud volcanoes exist in Inyo county, whose surfaces are below the level of the sea, covering an area of a quarter of a mile long by one-eighth of a mile in width; they consist of soft mud, through which hot water and steam are constantly escaping, keeping the mud in continuous movement. Innumerable mineral springs are found all over California, which are described in the county descriptions.

tion, the county of Alameda was organized. It contains 512,000 acres, 487,293 of which are assessed, leaving only 24,807 acres of waste land, some of which is partially covered by water from the bay, the remainder being mountain waste. The county is 32 miles long, and from six to twenty miles wide. It has nearly every variety of land, from low level tule lands to rolling mountain grazing lands. The topography of the county is a succession of low rolling hills and valleys, and in general aspect, the county faces to the southwest. Along the bay, on its west side, is a strip of land from six to fifteen miles wide that is from a few to several hundred feet above the sea level, all of the very choicest agricultural land. Along the water's edge there are from 20,000 to 25,000 acres of tide land, a great portion of which has been reclaimed. In the eastern portion of the county is Livermore valley, which is an elevated plain, from 350 to 500 feet above sea level; this valley is from twelve to fifteen miles in length and from four to eight miles in width, and is surrounded by a low range of mountains. Alameda has sufficient timber for fuel. The live oak is found in nearly all the valley portion of the county, with some scattered acamora, madrone and willows, and, in the vicinity of Livermore valley, there is considerable white oak. Alameda

railroads, bay, river, and sea-going vessels, she will be in a position to receive from and distribute to all parts of the State and the whole of the Pacific Coast, Mexico, Australia, and the world at large. She also offers unlimited choices of location for manufacturing enterprises, and has ample sites, combining railroad facilities, with wharves for sea-going vessels. The frontage, within the city limits, consists of over ten miles of railroad tracks, of which eight miles are available for manufacturing. Oakland enjoys a climate most favorable for human exertion, being neither too hot in summer nor too cold in winter; snow seldom falls. The mean temperature in January is 19 degs., and in July, 65 degs. The city's mortality, for its size, is the lowest in the world. The cost of living and rents are as low as those of nine-tenths of the cities in the United States. The educational facilities are fully up to the highest standard. Here, are located the State University, California Medical College, Military Academy, theological and other seminaries, grammar schools, etc. Several large manufacturing industries have recently been inaugurated. Among them are the Judson Manufacturing Company, with a capital stock of \$1,000,000, who manufacture various kinds of agricultural implements; the Pacific Iron and Nail company, which, when

gave it a white population of but 539. As the county lies east of the summit of the Sierras, it is almost as much isolated from San Francisco as though it belonged to another country. Alpine is strictly a mining county. There are some very rich quartz mines within her borders, some of the most noted of which are the IXL, Exchequer, Jennells, and many others. Some are being worked, but many are owned by parties who have not the means to develop them, as it requires large capital. This county is exceedingly well watered, as the Carson river rises in the southern part of it, and flows north. It is fed by numerous mountain streams, such as the East fork, West fork, Wool creek, Silver creek, Monitor creek, Smith's creek, Mogul creek, Indian creek, etc., which all flow up in the Sierras, amid perpetual snow. Among these mountains are numerous valleys; the largest and most noted are Diamond, Hermit, Pesaut, Faith, Hope, and Charity valleys. Diamond valley contains the principal farming lands, producing barley, hay, oats, potatoes, and some wheat, which find a ready market among the miners in the vicinity. The three sister valleys, Faith, Hope, and Charity, are located in the northwestern part of the county, at an altitude of 7,500 feet. These valleys are inhabited only during the summer months, and then only



by stockraisers and dairymen. In Pleasant valley large quantities of hay are cut annually. There are many smaller valleys in the county, where sheep and cattle are grazed during the summer season. The large amount of stock which grazes here is driven from other adjacent counties of California and Nevada.

#### Markleeville.

The county seat, is located on the east banks of the west fork of Carson river, at the base of a mountain where the snow-capped peaks of the Sierras can nearly always be seen. The town contains less than 250 inhabitants.

#### Monterey.

The second village in Alpine, is located some eight miles southeast of Markleeville, and is situated in a narrow canyon, with fine quartz mines on all sides. The large No. 2 Colorado Quartz Mills are located here. The town contains 200 people, who are principally miners.

#### Silver Mountain.

Is a small town located on the banks of Silver creek, at the foot of Silver mountain and is about eleven miles southeast of Markleeville; it has a fine location and a splendid summer climate, but, at times, in the winter, the town is almost snow bound. Alpine has many mineral springs, both hot and cold. The most noted are situated in Pleasant valley, a short distance west of Markleeville. The medicinal qualities of these springs are beneficial for rheumatism. They are becoming extensively known, as many an invalid has been restored to health and vigor by bathing in and drinking of their waters. This county has also vast forests of pine, fir, spruce, tamarack, etc.

Beautiful little lakelets are scattered all over the county, abounding in mountain trout and other fish. Very little fruit is raised here as yet. Small fruits and berries grow in profusion in summer, and the hardier varieties of apples do well and have an excellent flavor. The climate, in summer, is mild and healthful, and in winter much snow falls, especially on the mountains. The average temperature in summer is about 75 degs., and in winter about 40 degs. The people boast of magnificent mountain scenery and a healthful summer climate.

#### AMADOR COUNTY.

In the southern part of the north half of California, and on the western slope of the Sierras, extending to the edge of the Sacramento valley, and peculiarly wedged in between El Dorado, Alpine, Calaveras, San Joaquin and Sacramento, we find Amador county, containing an area of 300,000 acres of land. The western portion is broken into hills and rolling swells, with an occasional valley or stretch of plain between. The principal valley is the lower, situated in the south-west portion. Its soil is of a loose sandy loam and is very fertile; it is divided up into beautiful little farms, orchards and meadows; much of the surrounding hillside are planted to vineyard. This hilly or upland soils of a reddish nature, and is excellent grape land. As we go east to the neighboring hills and mountains, the land is yet in its virgin state, and is covered with chaparral, blue pine, etc. Once cleared, the level portions make very fair farming land, but is better adapted for grazing. In the smaller valleys, where water is brought in for irrigation, considerable alfalfa is raised. The principal water-courses are: the Mokelumne river, which drains the southern portion of the county, and the Cosumnes river which, with its branches, drain the northern portion. The smaller streams are: Bear river, Tiger, Deer, Panther, Dry, Jackson, and Indian creeks. There are many other small streams, which give ample facilities for irrigation. Unlike many mining regions, Amador has an extraordinary soil. Increasing quantities are cleared and improved annually; the productions of which are, wheat, barley, alfalfa, potatoes, wine and fruit. The foot-hills, and especially the valleys of the lower portion of the county, are very favorable localities for fine fruits and grapes.

The mineral resources of the county are coal, copper, gold. Quite extensive developments have been made, in the coal mines, by the C. P. R. R. Co., who have every facility for shipping, as a branch of their road leads to Ione City from Galt, on the main line. This coal is used on their trains and ferries between San Francisco and Oakland. Three strata of coal are found; the lower one, a vein five to seven feet thick, is considered a very fair quality of coal, and is also used for domestic purposes. Other mines are being developed by private parties, who have tapped good veins by tunnelling several hundred feet. About four miles from Ione City, near the road leading to Jackson, are the celebrated Newton copper mines, which are being extensively worked. The copper is ex-

tracted from the ore by the leaching process. Leaving the copper mines, and passing still further eastward, we soon hear the stamps of immense quartz-mills grinding up the ore. Large piles of pulverized rock attest the fact that some of the mines must have been sunk to a great depth. The Consolidated Amador is down 2,200 feet, the Mahoney, 800, and is still going deeper. The Keystone, and other mines in the vicinity, are all in active operation. The first town that is reached is Ione City.

Which is 133 miles northeast from San Francisco, at the terminus of the Amador branch of the C. P. R. R. It occupies a site on the edge of a lovely valley, which bears the same name, and is a thriving town, of about 650 people. About twelve miles northeast, by stage, is

#### Jackson.

The county seat, which lies in a beautiful little valley, surrounded on all sides by high hills; it contains about 1,200 inhabitants. Four miles from Jackson, by stage, we arrive at

The other towns are Volcano, Oleta and Drytown, each with a population of from 200 to 300. The census of 1880 gave Amador county a population of 11,386.

#### BUTTE COUNTY.

This county lies along the eastern side of the Sacramento valley, and is bounded on the north by Tehama county, east by Plumas, south by Yuba, and west by the Sacramento river. Butte is one of the largest counties in California, embracing an area of 1,385,410 acres, which are classified as follows: mineral, 552,360; timber lands, 568,640; agricultural, 195,840. The western part of Butte is comparatively level, and embraces most of the farming lands, while the eastern side is hilly and mountainous, and includes all the mines. The county is well watered by the Sacramento and Feather rivers; the latter, with its north and middle forks and numerous smaller branches, waters the southeastern portion of the county. Chico, Butte, and Dry creeks are large streams. The soil, along the river bottoms, is a rich, sandy loam. Between the

many other mines in the county; the principal localities are Wyanadotte, Bangor, Forbestown, Cherokee, Mountain House, Dagtown, Lonechoke, and Meship.

#### Chico.

The largest town, is situated in the western portion of the county, on the line of the Oregon division of the C. P. R. R., 235 miles north from San Francisco, in a rich agricultural country, that will rival, in fertility, any section of the State. The town, besides being supplied with water and gas, and well laid off, is beautifully shaded, by thousands of ornamental trees, and is one of the handsomest cities in the State; it now has about 3,800 inhabitants. Adjoining the town is General John Bidwell's farm, acknowledged to be the handsomest and best tilled farm in all California; the General took the gold medal, at the Paris Exposition, for the finest wheat in the world, and last year he paid out \$60,000 for hired help in the planting, tilling, and harvesting of his endless variety of cereals, fruits, and vegetables. The finest orchards in the State are here, and there are all classes of soil on this farm, from the red mountain foot-hill to the very choicest garden land.

#### Oroville.

The second town of importance, is the county seat. It is 24 miles south-west of Chico, at the terminus of the California Northern railroad, which runs from here to Marysville, where it intersects with the C. P. R. R. (O. D.) The country south and west of Oroville is a fine farming region, while in the foothills, near the town, there is considerable mining. The population is about 1,800. Oroville is not a handsome town, as it lies in a depression on the south bank of Feather river; but it commands an extensive mountain trade, reaching into northeastern California, for more than one hundred miles. Some heavy merchants have done business here for many years, and have become quite wealthy. A fine new flouring mill has recently been built, and several stage lines center in from Plumas and Lassen counties, on the north, and Yuba, on the south, besides the lines from Chico and Biggs.

The other towns are Gridley, Biggs, Nelson, Durham, and Nord, all located on the O. D. of the C. P. R. R., in the western part of the county, and surrounded by fine agricultural land. Butte has immense forests of sugar, yellow, and nut pine timber. This timber belt is in the eastern mountainous part of the county. Among the objects of interest to the tourists are the falls of Fall river, a bright, clear stream, rising in the mountains near La Porte, Plumas county, and emptying into the middle fork of Feather river, some ten miles above Bidwell's Bar. The river falls, in an unbroken sheet, over a precipice of 460 feet. The climate of Butte is pleasant, except during a hot spell in midsummer, lasting from three to six weeks. The rainy season sets in about the first of December, and lasts until the first of April. The rainfall for Oroville will average from 20 to 24 inches. Snow seldom falls below an altitude of 1,200 feet. On the more mountainous parts of the county it falls to a depth of over two feet.

#### CALAVERAS COUNTY.

One of the oldest settled counties in the State, and justly celebrated in the early days of its settlement for the fabulous yield of virgin gold from its rivers, gulches, and deep channel diggings, is located on the western slope of the Sierras, in the central part of the State, lying immediately east of San Joaquin, south of Amador, west of Alpine, and northwest of Tuolumne county. It is about 60 miles in length, with an average width of 30 miles, and has an area of 623,000 acres. The entire county may justly be regarded as a bed of mineral deposits, gold predominating; the lesser metals, such as copper, iron, and tin, are abundant, besides the magnificent ledges of marble, limestone, and granite, and her undeveloped beds of coal, which are known to exist. The principal natural wonders of the county are the world-renowned Big Trees, elsewhere described, the extensive cave, with its truly charming chambers, and the wonderful natural bridge, all of which are annually visited by tourists from all parts of the world. The immense timber belt, for grandeur, extent, diversity, and magnificent proportions, has no parallel in the entire timber belt on the western slope of the Sierras. Calaveras is one of the best watered sections of the State, her eastern border being defined by the Stanislaus river, the western by the Mokelumne, and the central portion, longitudinally, is drained by the Calaveras river and its tributaries. These streams and their branches are tapped at various points, and their waters distributed by artificial means, chiefly for mining purposes, to all sections of the county. The principal ones in the county are the Mokelumne Hill and Sycamore, on the west side, which take their supply from the Mokelumne river; and the Murphy's



KLAMATH RIVER VALLEY SCENE.

#### Sutter Creek.

Still the scene of active mining operations, principally gold quartz. This town has a floating population of from 1,000 to 1,500, as the mines are worked. A half-hour's stage ride, and some of the largest mines in the county, brings us to

#### Amador City.

The liveliest mountain town in this section, which is fairly outstripping all the other towns in growth. It is but a few years since a town was started here, and now it has over 1,000 inhabitants. It is strictly a mining town. Seven miles from Amador City, situated on an open plain, or table-land, lies the town of

#### Plymouth.

Which contains about 600 inhabitants. There, also, is heard the heavy stamp of quartz mills, grinding away, day and night, the whole year round.

The Amador Canal Company, a corporation which has extensive water works, furnishes water to Jackson, Ione City, Amador City, and Plymouth. The water is taken from the Mokelumne river, by ditches and pipes, to large reservoirs, from whence it is distributed in pipes to the different towns and mines.

Sacramento and Feather rivers lies an immense tract of black shale land, very productive in ordinary years, but liable to orethow during the wet season. Near the foot-hills there is a belt of red lands, formerly thought not worth farming; but, during the past few years, many small farms have been successfully tilled, as the land constantly improves by cultivation. The foothills contain land valuable for farming purposes, though, at present very little of it is under cultivation. Feather river has three forks, or branches, crossing the mining section, dividing the hilly portion into several extensive regions. Along these various streams, and on the several ridges are the principal mines. The immense hydraulic mines of Cherokee Flat are, perhaps, the most gigantic in the State. Hills several hundred feet high have been washed away to the bed-rock. These are considered as among the best-paying mines in the State. There are about 80 miles of large ditches and over six miles of iron pipe leading to the mines, supplying about 2,200 inches of water per day. The cost of the ditches and reservoirs is nearly half a million of dollars. From twelve to eighteen Hydraulic Giants are at work, and a large number of men are constantly employed. There are



Canal, on the east side of the county, which takes its supply from the Stanislaus. These two extensive works have many lateral ditches for the distribution of their waters. The Calaveras river is also tapped at various points, as are the many tributaries of the several main streams, principally for mining purposes, as there are innumerable operations in quartz, hydraulic, and channel mining throughout the county. There are many ledges of quartz, some of which carry gold in good paying quantities, noticeable among which we might mention the Givon mine, located in the west central side of the county, and which is being prosecuted with an energy and upon a scale second to no similar mine in the State. The American Obavannie, on the east central side, the Champion and Boston, in the north and east parts of the county, are all good paying mines.

#### San Andreas.

The county seat, is an old mining town, and now has a population of 800. It is 143 miles nearly due east from San Francisco, and is reached by railroad to Milton, just in the edge of Calaveras county; from thence by stage 22 miles. West Point is the extreme town on the north-west; Mokelumne Hill on the west center; Campo Seco and Comanche on the south-west; Jenny Lind and Milton on the

28,000 acres, the low hills at 480,000 acres, and the remainder, about 4,000 acres, is mountain waste. The best land is along the streams, and especially along the Sacramento river, which runs almost due south, forming the western boundary of the county for eighteen miles, then runs through the county—21 miles—in a straight line, and again forms the eastern boundary. The soil along the river is of a sedimentary, decomposed vegetable nature, making the most productive land in the world. The second best lands, the soil of which is the black adobe, usually lie between the river-bank lands and the foothills; they are considered the best of grain land, but are somewhat difficult to farm, as they do not want to be ploughed either too wet or too dry. The third-rate lands are valley lands that are spotted and impregnated with alkali. The fourth-rate are the mountain pasture lands in the western portion of the county.

The Sacramento river is skirted on either side with a growth of timber averaging a mile in width, which is principally oak, sycamore, cottonwood, and ash. Along the Coast Range there is considerable fine pine saw timber. Colusa county is watered by the Sacramento river. The river is navigable all the year round, to the upper end of the county. Stony creek rises in the Coast Mountains, about 40

of fertile land between the river and the slough, and Yolo, Sutter, and Colusa counties, is known as Grand Island.

The census of 1880 gave Colusa a population of 13,118; add to this an increase of about 800 for the past two years.

Colusa is not classed as a mining county, yet there is both gold and quicksilver found within her borders. Colusa is not without her mineral springs. Among them we will name Allen's soda springs, the water of which is very pleasant to the taste, being strongly impregnated with carbonic acid. Cook and Fout's springs, are located in Bear valley near the noted Bartlett spring, just across in Lake county.

#### Colusa.

The county seat, is located on the extreme eastern side of the county on the banks of the Sacramento river. This is the largest town in the county, and has a population of 3,000; it is regularly laid off with wide streets, and has some very good and substantial brick business blocks. The Sacramento Transportation Company's steamer, which ply between here and Sacramento, also run up the river, some 90 miles, to McIntire's Landing. Ten miles west, on the C. P. R. R. (O. D.), we come to the town of

#### College City.

Located in the southern part of Colusa, some eighteen miles south from the county seat, contains about 250 inhabitants, and is in a fine agricultural country. Some three miles east is

#### Arbuckle.

located on the railroad, with a population of about 200.

#### Butte.

Is the shipping point for the large wheat farm of Dr. H. J. Glenn, and has one general store.

Sulphur creek is a small mining town in the Coast Range of mountains. Central is a city of the future. Spring valley, St. Johns, Neville, Butte City, Kanawan, and Leesville are all small trading points in various portions of the county.

#### CONTRA COSTA COUNTY.

Is bounded on the north by Solano and Sacramento counties, the San Joaquin river, Suisun bay and the Straits of Carquinez forming the line; on the south by Alameda county and San Francisco bay; on the east by San Joaquin county. It will thus be seen that the geographical position is a most desirable one, being about midway of the coast line of the State, fronting the Golden Gate, and with a water frontage of seventy miles on the western and north-



CALIFORNIA POWDER WORKS, SANTA CRUZ COUNTY, CALIFORNIA.

south; Copperopolis on the southeast; Altaville and Angels' Camp on the east center; Vallejo, Murphy's, and Sheep Ranch on the north-east of the county. From Milton, the terminus of the railroad, where all supplies for the central and eastern portions of the county are received and distributed, stage lines diverge to San Andreas, Sheep Ranch, Copperopolis, Angel's, Murphy's, the Big Tree groves, and Sonora. A daily stage line also runs from Lodi, on the C. P. R. R., to the Gwin mine and Mokelumne Hill, intersecting with the Jackson and Anador line via Galt, or Lone city. The undeveloped resources of this county are almost inexhaustible.

#### COLUSA COUNTY.

Comprises a large portion of the great Sacramento valley, and is bounded on the north by Tehama, on the east by Butte and Sutter counties, on the south by Yolo, and on the west by Lake and Mendocino counties. It has an area of 1,472,000 acres, and is 65 miles from north to south, and averages about 65 miles from east to west. Of this vast territory, about 960,000 acres lie along the Sacramento valley, as the summit of the Coast Range forms the western boundary, the balance of the county is composed of mountains, low hills, and small valleys. The valley portion of this balance is estimated at

miles south of the north line of the county, and runs almost north to the upper end of the county, where it diverges to the east, enters the valley, and runs southeast to the Sacramento river. This stream drains the entire eastern slope of the Coast Range for about 50 miles, consequently it carries off an immense amount of water during the rainy season. About 20 miles north from the south boundary of the county there is a kind of divide separating the waters of Cache creek, running south, from those of Stony creek running north. These creeks enter the Sacramento valley about 75 miles apart, and no streams enter it between them. The country between these waters and the plains is covered with low hills, in which small creeks have their rise, and run east to the plains, where they sink in the sand. Eighteen miles north of the south boundary of the county is Butte slough, which is a large estuary, nearly one fifth the size of the Sacramento river, and runs in a southeasterly direction into Sutter county, where it is lost in the tule basin formed by the Sacramento and Feather rivers. Sycamore slough leaves the river on the west side some four miles below Butte slough; the great slough flowing into the river from the tule to Knight's Landing, in Yolo county, and about 30 miles from the head of the slough, takes the name of the Lower Sycamore, and the large body

#### Willows.

Named after Mr. W. H. Williams, the founder of the town. There are, at present, about 400 inhabitants. The town is supported by the wheat-farming country that surrounds it on all sides.

#### Maxwell.

Situated on a level plain, has a population of about 250. The immense grain warehouses located here are positive proofs that this is one of the best wheat-producing sections in the State.

#### Willows.

The second largest town in Colusa county, is located on a level plain in a fine agricultural country. The business portion of the town was nearly all destroyed by fire early in the season, but it is now rebuilt. Midway between Maxwell and Willows is the village of

#### Gowan town.

Situated in a fine wheat section. It contains about 200 inhabitants, several large grain warehouses, two hotels, and a few general stores. We now pass on north to the village of

#### Orland.

Situated on both sides of the railroad, in a fine agricultural country. Orland has a population of 450.

#### Potrero.

Situated in the northwestern part of the county, on the river, which was quite a trading place before the railroad entered the county.

ern border. The county was organized as early as 1850, which embraced Alameda's territory. Contra Costa county now has an area of 444,401 acres. The Coast Range of mountains run parallel with the ocean across the county, extending in a southeasterly direction. The most distinguished feature of this range is Mount Diablo, standing out boldly 3,806 feet above the sea-level, its location being very near the center of the county. Its prominence caused it to be selected by the Government as the initial point of base and meridian lines in the survey for nearly two-thirds of the State's area. The immense coal fields of the Mount Diablo foothills are an important source of wealth to the county. These mines were discovered in 1859. The Black Diamond vein, for twenty years, has yielded its treasure to the never-tiring pick of the miner. Several railroads have been constructed from deep-water navigation, at the head of Suisun bay, up into the mines. The Pittsburg and Union mines, at Somersville, one mile east of Norionville, also ship their coal products over a road six miles in length, to tide water. Two miles eastward is located the Central mine. Next comes the Empire, which was opened in 1875. This mine has yielded 120,000 tons of coal within the last four years. The coal taken from the Mount Diablo district amounted to over 97,000 tons for the last year. The Black



Diamond furnishes employment to 250 men, and yields 72,000 tons annually.

With the exception of coal mining, Contra Costa is mainly an agricultural county; her exports are wheat, barley, oats, butter, live stock, hay and corn. The topography of the county is low hills and small valleys. The central valley is about fifteen miles in length, and from one to six miles in width. The various names of Pacheco, Ygnacio, Diablo and Walnut creek are applied to this fertile section which yields an abundance of cereals and fruits. Crops rarely fail.

San Ramon is the second valley of some ten miles in length, and from one to two miles in width, extending from Walnut creek to the Alameda county line. It contains some of the pleasantest homes of the county. In its western portion are a number of small, fertile valleys, such as San Pablo, Pinole, Briones, Rodeo, Tajiri and Alhambra, all settled with thrifty farmers. The farming lands in the eastern section of the county extend from Bay point, a spur east of Mount Diablo, and between the foot-hills and the San Joaquin river to the county line, being 23 miles in length by front three to six in width, and embrace about 60,000 acres of arable land. The soil is, generally speaking, of a rich, alluvial nature, and produces wheat and barley. To the northward, and between the uplands and the San Joaquin river, is a body of tule lands, embracing, in all, some 50,000 acres. Large sums have been and are now being expended in reclaiming these lands, which become marvellously productive, the soil being a rich deposit of sediment and decomposed vegetation. Thousands of acres are leased to Chinamen and Italian gardeners, who pay an annual cash rental of from \$10 to \$20 per acre. The San Francisco vegetable market is largely supplied from these lands.

As in most counties in our State, so here one may find a diversity in climate. Generally speaking, it may be regarded as a medium between the chilly fogs of San Francisco and the enervating heat of the inner valleys. The afternoon westerly trade winds, blowing fresh from the ocean, are modulated by the warmer inland air-currents, rendering this climate delightful, neither too hot nor too cold. In summer the mercury ranges from 75 to 85 degs., and, in some cases, 90 degs., and in winter from 45 to 70 degs. The seasons are divided into the wet and dry. From May to November is summer, but the gentle ocean breeze is always invigorating. The hot, sultry nights of the Atlantic States are unknown in California.

#### Martinez.

Situated on the Straits of Carquinez, is the county seat, and contains a population of about 700 people. The overland railroad now passes through the town, and the commerce of the Sacramento and San Joaquin rivers also passes in full view. There are a few wealthy citizens in the place, who live on the interest of their capital, and own the greater portion of the town.

#### Port Costa.

A new and enterprising town, which has sprung up since the building of the two railroads, *viz.* Martinez, Antioch and Lathrop, where the Southern Pacific Railroad intersects with the road via Stockton, Benicia, Suisun and Dixon to Sacramento, and the other crosses the straits *via* Benicia, Suisun and Sacramento. Port Costa has advantages that few places in California possess, one of which is deep water, enabling the largest sea-going vessels to come and load with wheat, as well as the largest grain warehouses on the Coast. The town has over 3,000 feet of wharfage for shipping facilities. The monster ferryboat "Sedona," 425 feet in length, with four tracks, is capable of conveying four trains of cars safely across the straits between Port Costa and Benicia, a distance of one mile.

#### Cruz Kota.

Located midway between Vallejo Junction and Port Costa, right on the banks of the straits, and on the line of the Southern Pacific Railroad, there are located J. L. Heald's Agricultural Works, a large fire-proof brick structure, 104 feet wide by 301 feet in length. It is one of the most complete and

conveniently located manufacturing establishments in the country.

#### Vallejo Junction.

At this point passengers are transferred for Vallejo, Napa, St. Helena, Calistoga and all places north-west, to Mendocino, Lake and Humboldt counties, and the great northwest. About midway between this place and Berkeley we come to the village of

#### San Pablo.

Which is only about seventeen miles from San Francisco. The old town is about one mile from the railroad station.

#### Antioch.

On the San Joaquin river, and also on the Central Pacific Railroad, distant 55 miles from San Francisco. The town has a population of 900, and is pleasantly situated on the bank of the San Joaquin river. It is regularly laid out and has some very creditable buildings. Antioch is certainly one of the best locations for manufacturing operations in the State, as it lies on the river and railroad and in close proximity to the Mount Diablo coal fields, with a narrow-gauge railroad to the Empire and Central mines, a distance of some seven miles. Good steam coal can be had here cheaper than any other place in the State. The country around Antioch is all good agricultural land, some fine orchards being in the vicinity.

Legislature for a distance of 60 miles, to Orleans bar. Besides this river and Smith river, which, with its north, middle, and south forks, flows in Del Norte, and flows northwesterly into the ocean about six miles south of the northwestern corner of the State. There is a large number of smaller streams which afford excellent water power in different parts of the county. The principal harbor is at Crescent city, which is located on a small bay, in latitude 41 deg. 41 min., longitude 120 deg. 10 min., which is 280 miles north of San Francisco by water, and about the same distance south of the Columbia river. The harbor is an open roadstead, with no bar to cross, and affords shelter for vessels during the summer months, when the wind generally blows from the northwest, but it is open and unprotected against the southerly gales which prevail during the winter months on this coast. Vessels find good anchorage in five to seven fathoms of water. Two lines of steamers ply between here and San Francisco. There is an immense amount of Government lands, both agricultural and mineral, in Del Norte county. No finer redwood timber can be found on the coast than is here within a few miles of this harbor, and, within easy reach of the place. Del Norte county, as before stated, has an area of 860,000 acres, the greater portion of which is mountainous, and 75,000 acres of it are as yet unsurveyed; 27,980 acres of timber land is sur-

veyed, besides the mineral claims in different portions. The farming land now surveyed is about 15,000 acres. A great portion of the unsurveyed lands is excellent timber. Gold mining has been steadily and successfully pursued since 1851. The most important gold mines in the county are at Happy Camp, and are mostly hydraulic diggings. The production of gold is from \$200,000 to \$300,000 annually. Copper ore was first discovered in Del Norte in 1849, in the northwestern part of the county, in what is known as the Low Divide District. Five good mines, the Hancock, Occidental, Alta, Union, and Mammoth are all located on good paying leads. In the Big Flat District is the Crescent copper mine. The chrome mines of Del Norte are situated in the Low Divide District, in the vicinity of the copper mines. The first shipment was made by the Tyson Smelting Company, of Baltimore, Md., in 1863, which has control of the chrome business in the United States. There are extensive deposits of chrome in this county.

Immense deposits of iron ore, of various grades and classes, are found in different parts of the county, the bulk of which is in the vicinity of the copper and chrome mines. These iron ores have been tested by scientific men, who pronounce them of a very high grade. Coal was discovered several years ago, a few miles north from Crescent city. The United States Government is holding a strip

of country on the south side of the county, twenty miles in length and two miles wide, which lies on either side of the Klamath river, from its mouth inland. Here are thousands of acres of the finest redwood timber in the State, also immense mineral resources, rendered useless and idle. We are told, by good authority, that there are less than 100 Indians now on the reservation. When this land is once open to white settlers, it will become the most valuable territory in Del Norte. The county is but sparsely settled, there being only 2,600 people within her borders.

#### Crescent City.

The county seat, with a population of 1,000, is situated on a small bay, looking south-west, and facing the sea, at the foot of the Coast Range of mountains. Nearly all of the exports and imports of the county are from Crescent city; in fact, there is an extensive country tributary to this point, reaching north into Josephine and Jackson counties, Oregon. The climate of that portion of the county near the sea-coast, comprising Crescent city, Elk, and Smith river valleys, is, in its general character, mild and healthy. Severe frosts are seldom experienced. The heat in summer is not oppressive, and, although little or no rain falls in the summer months, the close proximity to the ocean lends moisture enough to the atmosphere to sustain the vigorous growth of plants. The immense fern and weeds in the redwood forest indicate no lack of moisture. The rainfall at Crescent city is from 60 to 70 inches for the season.

#### Del Norte.

Sometimes called "Smith River Corners," is about sixteen miles north-east from Crescent city, and contains 200 inhabitants. There are only three villages in the county, the third being a mining camp, on the extreme east side of the county, called

#### Happy Camp.

The town is built on both sides of Indian creek, near its junction with the Klamath river, and surrounded by mountains, the only means of reaching the place being by mountain trails. The country around it is rich in gold, and its chief support is in mining. What Del Norte most needs is harbor improvements in Crescent city. That will bring in people with capital, who will improve her many water powers, saw up her immense forests of redwood into lumber, and unlock the great vaults in which her vast minerals are now sleeping. The present sparsely settled country will then team with industries which at present are scarcely thought of, when her gold, iron, chrome, fish, lumber, and butter will be sent by her own ships in all parts of the world.

#### EL DORADO COUNTY.

Where gold was first discovered, on the 19th of January, 1848, lies about 110 miles—that is, it

western boundary—east by north-east from San Francisco, and reaches to the State of Nevada, while the west borders on Sacramento county. It is bounded on the north by Placer, south by Amador, while Alpine corners its south-eastern boundary. Nearly every climate, to be found in any State in the Union, may be found within her borders, as the altitude ranges from 800 feet to almost perpetual snow. The western foothill belt, comprising an area of some 30 by 43 miles square, contains nearly all of the agricultural and mining ground. The county has an area of 2,210,000 acres, and may be considered as a mining county, although considerable farming, dairying, and fruit-raising is carried on in the western portion, while the eastern portion is heavily timbered with pine, fir, oak, and other mountain timber.

The general trend of the Sierras, through Nevada Placer, El Dorado, Amador, and Calaveras is north and south. Auriferous gravels lie along the western part of the county, in the foothills. A formation is found in the county which is usually known as the "Idaho lead," because of its peculiar color and it is thought to be a dead river whose channels and gulches leading therefrom have been the repositories of immense quantities of coarse gold. Palatable sums of gold have been taken from this formation. Throughout the principal portion of this mineral belt runs a strong mineralogical form-



STONE FARM-HOUSE ON UPPER SACRAMENTO RIVER.

#### Walnut Creek.

One of the prettiest towns in the county—we may say to the State—has a population of 500. The other towns in the county are Judsonville, Somersville, Danville, Adams, Lafayette, Pacheco, Concord, Clayton, Black Diamond, Nortonville, Pittsburg Landing, and various smaller places.

#### DEL NORTE COUNTY.

Situated in the northwest corner of California, is bounded on the east by Siskiyou, south by Humboldt, north by Curry and Josephine counties, Oregon, and on the west by the Pacific ocean. It has an ocean frontage of 32 miles, and extends east 42 miles, being nearly square, with an area of 860,000 miles. Its topography is a succession of mountain ranges, in the western and southern portions, which are well timbered with redwood, hemlock, spruce, cedar and pine, while in the eastern part the surface is broken and mountainous. The Siskiyou mountains, in the east and center, attain an altitude of 6,000 feet—many peaks from 4,000 to 5,000 feet. Along the coast they are from 700 to 1,000 feet, and are covered with very heavy redwood and spruce timber. The face of the country, in the western portion of the county, slopes toward the sea. The Klamath river enters midway on the eastern line, and flows south-westerly into Humboldt for 60 miles; it is the second largest river in the State. It was declared navigable by the State

veyed, besides the mineral claims in different portions. The farming land now surveyed is about 15,000 acres. A great portion of the unsurveyed lands is excellent timber. Gold mining has been steadily and successfully pursued since 1851. The most important gold mines in the county are at Happy Camp, and are mostly hydraulic diggings. The production of gold is from \$200,000 to \$300,000 annually. Copper ore was first discovered in Del Norte in 1849, in the northwestern part of the county, in what is known as the Low Divide District. Five good mines, the Hancock, Occidental, Alta, Union, and Mammoth are all located on good paying leads. In the Big Flat District is the Crescent copper mine. The chrome mines of Del Norte are situated in the Low Divide District, in the vicinity of the copper mines. The first shipment was made by the Tyson Smelting Company, of Baltimore, Md., in 1863, which has control of the chrome business in the United States. There are extensive deposits of chrome in this county.

Immense deposits of iron ore, of various grades and classes, are found in different parts of the county, the bulk of which is in the vicinity of the copper and chrome mines. These iron ores have been tested by scientific men, who pronounce them of a very high grade. Coal was discovered several years ago, a few miles north from Crescent city. The United States Government is holding a strip



a ion, known as the Mother Lode. This lode is well defined, as it lies in serpentine and granite, and it can often be traced for long distances, by its outcrop. The thickness varies from a few to 50 feet. Innumerable ledges of quartz, generally white, or bluish white, exist all over the county. A large portion of them carries gold in sufficient quantities to keep a number of quartz mills in operation in various parts of the county. Among the best-de-

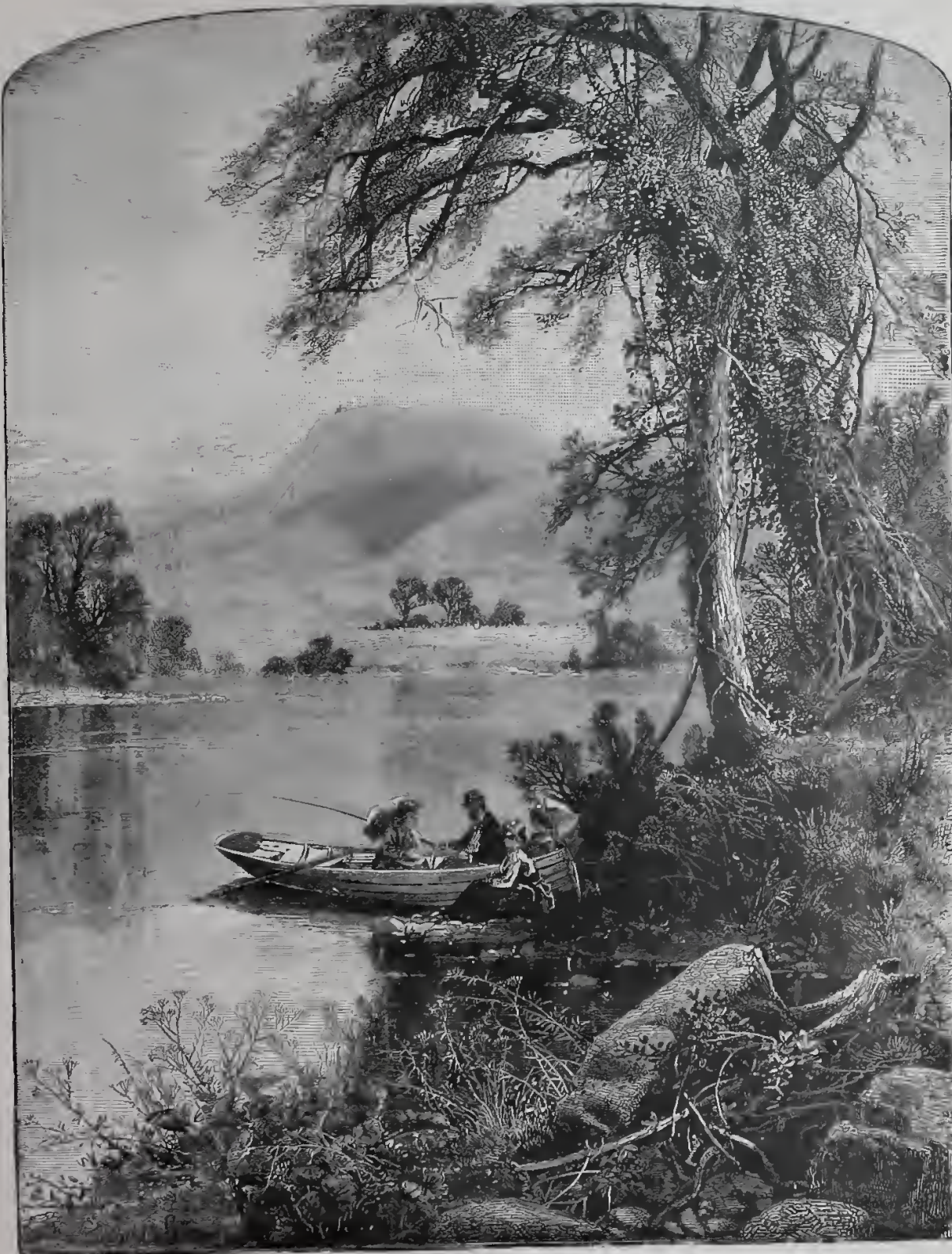
and at better prices than are obtained at the San Francisco markets. The dairy interest here is a large one, and is the most profitable. Those engaged in it are provided with two ranges; one in the lower foot-hills, for winter use, and the other on the eastern borders of the county for summer. The latter is at a high altitude, and is usually covered with snow until the first of May, when it disappears, and the most luxuriant feed springs forth

minus being Sbringle springs, 140 miles northeast from San Francisco.

Georgetown, Greenwood, Coloma, and El Dorado are all old mining towns.

The county is well watered by the American river and its numerous tributaries. The system of canals which supplies water for bathing, mining and irrigation, is unsurpassed by that of any other county in the State.

summit of the Sierras forms its eastern boundary, the summit of the Coast Range its western, and the general course of the Chowchilla river its northern, and King's river its southern boundary. The central portion of the county comprises a large part of the great San Joaquin valley, its lowest portion contains about 300,000 acres of marsh and low lands, formed by the waters of King's river, and during high water being partly covered with the mingled waters of King's and San Joaquin rivers. The eastern two-fifths of the county is mountainous



SCENE ON THE UPPER SACRAMENTO.

veloped mines are the Church Union, the Placerville gold quartz, Mount Pleasant, Grand Victory, Rosekrans, and a number of others. Hydraulic mining has been extensively carried on in the vicinities of Placerville, Greenwood, Georgetown, Coloma, and other portions of the county, besides the Placer, shale and seam diggings, in other sections. Iron, copper, silver, and slate are known to exist, the latter being worked to some extent.

Farming is as yet in its infancy in this county, and there is a home demand for all of the products,

and keeps green all summer. The western and central portion of the county, the dividing line of snow and rain, is especially suited to the raising of fine fruits, such as pears, peaches, apples, plums, and fine grapes, which are acknowledged to be superior in flavor to those raised in the valleys.

#### Placerville.

The county seat, one of the oldest and largest mountain towns in the State, at present has a population of about 2,500. The S. V. R. R. now runs to within eleven miles of the town, the present ter-

#### FRESNO COUNTY.

Fresno is the third county in area in the State, containing 5,600,000 acres of surface. Of this vast territory 4,400,000 acres may be classed as mountainous and pasture lands, and about 1,200,000 as agricultural and fruit lands. This county lies between the 36th and 37th degrees of latitude, and is very nearly the central part of California, extending northeasterly and southwesterly a distance of 120 miles, and its average breadth is something over 65 miles. It is bounded north by Merced and Mariposa, east by Mono and Inyo, south by Tulare, and west by San Benito and Monterey counties. The

comprising the highest portion of the Sierra range, and the most elevated mountain region in the United States, extending from Mount Lydell, on the north, to Mount Tyndall, on the south, a distance along the range of over 100 miles. Within this region rises the Fresno, San Joaquin and King's rivers, amid perpetual banks of snow and ice. Fresno contains forty living glaciers, some of these lying under the crest of the Palisades, being some two miles in length; and, also, many of the loftiest peaks in America; Mount Goddard, Mount King, Mount Gardner and Mount Tyndall are upwards of 14,000 feet above sea-level, while a large number of



other peaks approach very nearly to this height. There is no pass over the summit less than 9,000 feet above sea-level.

On the westerly slopes of these ranges are found some of the heaviest bolina of timber in the State, and in several localities groves of the big trees, or *Sequoia gigantea*, in which some single trees are found measuring 120 feet in circumference. Of the 5,560 square miles of mountains in Fresno county at least four fifths are in the Sierras. These may be divided into three distinct divisions or zones: the foot-hills bordering the plains and extending back from twenty to thirty miles to the distinctly outlined pine ridge or timber belt. These foot-hills commence at an elevation of 200 feet and are covered with scattered oaks, increasing gradually as the mountains proper are reached, to 2,000 and 2,500 feet, when they suddenly rise to an elevation of from 4,000 to 5,000 feet, and are covered with a heavy growth of pine timber. The timber belt reaches back from 30 to 40 miles at an elevation of some 10,000 feet, the higher regions being covered only by dwarfed and scattered tamarack. The high Sierras proper cover a belt of about 30 miles; are nearly devoid of brush or timber, and are broken into deep chasms, jagged and lofty peaks, ancient glaciers, basins and present fields of ice and snow. As it is the highest, so it is the wildest and most interesting mountain region in the United States. The geological formation of the entire mountain chain is as diversified as the fauna or flora.

The foot-hill regions are generally granite, cut across from north to south, or southwesterly, by occasional seams of slate and frequent narrow seams of quartz. In some sections large masses of white, flinty quartz are found, and in these localities the hills are covered with redish clay. There are no extensive placer, and the numerous small ones that have been worked are, as a rule, confined to the foot-hills.

Gold-bearing quartz has been found throughout the range. Generally, when the range is broken by seams of slate, the several mines, opened and being opened, promise well. Likewise, mines of copper have been found, and one or more of them worked. The higher, or timber range, is less broken than the foot-hills, though the ravines are deeper and the geological formations more varied. The soil, generally, is darker and richer. Small meadows and marshes are numerous, and water is found in every ravine. North of the San Joaquin is an elevated, comparatively level, timbered plain, reaching back well toward the summit, over which a railroad line has been surveyed, designed to become part of an eastern route. Between the San Joaquin and Kings rivers the country is more broken, the evidences of both volcanic and glacial action more abundant, and the varieties of rocks and minerals more numerous.

The Coast Range—or, more properly speaking, the Mount Diablo Range, there being a valley (the San Benito) between the Mount Diablo and Coast Range proper—begins about twenty miles from the San Joaquin river, and is about twenty miles from the plains to the summit. The first ten miles are low hills, devoid of timber, but covered with grass, hence to the summit the hills are more abrupt, covered with scrubby oak, and, in many places, with a dense growth of hoppel. The streams are the big and little Panuche; the Canyon, Pono and Chiu are the only streams flowing toward the San Joaquin, which divides the country into two unequal parts, about one third being on the west side of the river. All the streams on the west side of the San Joaquin sink soon after reaching the plains.

Fresno county has 2,592,800 acres, a little over one-third of its total area, lying in what is known as the great San Joaquin valley. This valley, extending from the Sacramento river south to Fort Jon, has a length of about 250 miles and an average width of about 60. Kiri lake, at the extreme southern portion of the valley, has an elevation of 282 feet above sea-level, and 260 miles from the mouth of the San Joaquin. Its waters connect, by a series of sloughs and small lakes, with the waters of Delta Lake and Lake, which latter has an elevation of 204 feet and an area of 760 square miles. Tulare lake connects to the San Joaquin river by Fresno slough, about its middle north. From Tulare lake north to the Sacramento river, the valley has a nearly uniform fall of a little more than one foot to the mile in its lower depression, while the slopes from the foot-hills, on either side, inward the center, average about six feet to the mile. This valley portion of Fresno county occupies a section about 60 miles square. Several distinct regions are formed distinct in rainfall, distinct in soil, distinct in topography and character of water, and the general facilities for irrigation and cultivation. The fertility of the east side is about twice the area of the west. Fresno county affords almost every variety of soil, and a dozen varieties may be found often within an area of two miles square. As a rule, the warmer the hills the harder the land, though there are some exceptions. Along the foot-hills from the San Joaquin river, south, are several miles of red clay land, covered with white quartz, as much like the Malaga grapes found in Spain as in California. The great bulk of the plain land of the entire eastern slope, however, is a soft, sandy loam, mixed with clay, sand, decayed natural and vegetable matter, iron and other mineral salts. Generally speaking, the San Joaquin valley lands are free from alkali. The

country lying west of the San Joaquin river is unlike that on the east; while much of the land is black and rich, but the small amount of rainfall and apparent impossibility of obtaining water, even for drinking purposes, makes this region practically a desert. A large canal has been constructed by Messrs. Allier & Lux, which has brought several thousand acres under cultivation.

#### Fresno City.

On the first of May, 1872, nearly 11 years ago, the railroad company formally located the town, which is situated near the geographical center of the county, on the line of the Southern Pacific Railroad, 195 miles southwest from San Francisco. This budding little city now has 2,900 inhabitants, and in the amount of business done and general thrift, it rivals many of the towns of California of double her age and population. The colonies of Fresno county, are nearly all in the vicinity of Fresno city; the oldest is the Central California Colony, which dates back to June 1, 1875, when six square miles of land were selected as the site of this enterprise. The land lies in close proximity to the line of the Southern Pacific Railroad, and two and a half miles south from Fresno city. This land was divided into 192 farms of 26 acres each. Each lot was surveyed with reference to its being commanded by water ditches, and gates were constructed. The first settlers began to make their improvements in the fall of 1875. At present there are about 80 families residing in the colony. Immediately adjoining the above lies the Washington Irrigating Colony, which embraces eleven square miles. This is laid out into 20-acre tracts. The land is nearly level, inclining toward the west. The soil is a rich, sandy loam. There are now a population of about 350 people. Between the first

being three times as large as the State of Rhode Island. Its length from north to south is 108 miles, and its greatest breadth is 48 miles. It is separated by a wide strip of mountainous territory, traversed by railroads, from central California on the south, the Skislay or Coast Range separating it from the great Sacramento valley, on the east. The topographical features are remarkable more some of the Eastern States than any other portion of California. There are no large valleys. It consists of rounded ridges, with prairies on top, and wooded sides and small valleys between. No spot on earth, of equal extent, was ever favored with such wealth in forest, so accessible to the world's highway, as Humboldt. The largest area of level land is in the vicinity of Humboldt bay, on the western line, about midway between the north and south line. The Coast Range commences at the ocean, and falls back from the coast, increasing gradually in height, until it reaches an elevation of some 4,400 feet, known as the Bald Hills. They extend slightly from the ocean, around Humboldt bay. This bay is long and narrow. Its length is over 20 miles, in width ranging from less than a mile to eight miles. The area of the bay is from 35 to 10 square miles, a portion of which is very shallow tide water. The soil to the bay is at the south end.

One-third of this country is as yet unsurveyed, and there are only 14,250 people within its borders; the unassessed lands amount to 1,483,160 acres. Of this there is not more than perhaps one-fourth that might be called waste land, and is the rocky cliffs along the sea shore, and some of the tallest mountains in the eastern part of the county. The balance of the unsurveyed lands are what might be called grazing lands, the most of it being covered with an luxuriant growth of stunted timber, while some of it may come under the head of

crack, which also flow into the same bay. The river has a course of more than 125 miles to the county, and with its tributaries, Vanuzaan, South Fork and Yag, reach over 160 miles in length, constituting an important feature. The Mattoles, with its 100 miles, 75 of which are in the county, the next and last stream of importance within the territory of Humboldt county, is Bear river, designating them as we have from north to south, all of which mingle with Pacific waters.

Humboldt has some rich gold deposits; Orleans bar, in the northern corner has long been known as a rich placer field. At Gold bluff, on the northwest side, are the black sand beach mines that have been worked for 20 years with good results. Placer mining has taken a new start, and a large amount of capital is being invested. There is little or no speculation in this industry, for, with capital and good judgment, the returns are as sure as any other legitimate enterprise.

The low lands of Humboldt county are worthy of note, although little attention has been paid to them as yet. In the vicinity of Humboldt bay, between Eureka and Arcata, there are thousands of acres of swamp and overflowed lands; from Eureka, across, are what is known as the Hookton flats. Then there is another large tract of land, from the island to Mad river, and the marsh south of Eureka to Humboldt point, and still further south to the mouth of Eel river, all of which would be easy to reclaim, but lay in a state of nature. The value of these lands, when once reclaimed, would be incalculable.

#### Eureka.

The county seat, has at present a population of 5,000 people, and is the most important place in the county. It is located on the eastern shore of Humboldt bay, about midway between the entrance and the northern end of the bay, and is the principal shipping point of the county. It is built upon an elevated site, on nearly level ground, gradually sloping to the northwest, affording fine drainage. The water front is very good and has a continuous line of docks for a distance of eight blocks, where vessels of all kinds find ample room for loading and discharging cargo. Several lines of steamers ply between this point and San Francisco, besides, vessels from all parts of the world come to here for the excellent redwood lumber manufactured here. A daily line of stages also runs via Cloverdale to San Francisco, a distance of 213 miles. Eureka also has several local lines of railroad, principally for transporting lumber and logs from the interior to the water. Considerable ship-building is carried on here by five or six yards, this being an eligible location, as the material for ship-building is to be had in abundance.

#### Arcata.

Is connected with Eureka by a short route across the bay, a distance of some seven miles, and by a good wagon road, a distance of twelve miles. Arcata has a population of about 1,000, and it has more the appearance of an English village than a California town, it being decidedly the handsomest town in the county, and it boasts of the finest climate in the country. The fine agricultural and fruit lands that surround it are of wonderful fertility, possessing a soil that is literally inexhaustible. It has vast reduced costs in the background, that generations will not exhaust.

#### Fernside.

Is the third largest town in point of population, containing 783 people, and a few Chinese. It is connected by daily stage with Eureka, and is located some eighteen miles south. It is beautifully situated, on the south side of Eel river valley, about one mile beyond Fall river at the foot of the range of hills bounding Eel river on the south. Francis creek, a swift little stream, runs through the town, affording splendid facilities for drainage. Fernside is well situated for a business place, having the farmers on the south and west sides of the valley, and on the other the settlers of the Bear river and Mattoles sections. This valley is about twelve miles in length, and from four to eight miles wide. This may properly be called the cream of Humboldt county as an agricultural district.

#### Humboldtville.

Has a population of 500 people. This town is situated 22 miles southeast from Eureka, and is pleasantly located in the rich valley of Eel river, one mile north of the stream. The principal wagon road of the county passes through the place. It has an excellent farming and grazing country on one side, and redwood timber on the other, to back it.

#### Hyaksville.

Which is numbered the fifth town in the county, has a population of 300 people. It is situated on high level land nearly 300 feet above the general level of Eel river valley; it has a fine farming country for 27 miles.

#### Trinidad.

Lies northwest from Eureka, a distance of 37 miles; it is on the ocean; a fair harbor is here, and a day-voyage light house.

The other towns are Table Bluff, Hookton, Pefells, Blaxburg, Garberville and Springsville, nearly all supported by the lumber interests of the county.

#### INYO COUNTY.

Lies east of the Sierras, the summit of which forms its western boundary between this, Tulare, and Fresno counties; the State line between California and Nevada forms its eastern boundary, with San



HOW TO BUILD A SUMMER-HOUSE.

named colony and the city of Fresno lies the Fresno Colony, which, like its predecessors, has been subdivided into 20-acre tracts. About three miles northeast of Fresno we came to the Semulnavian Mine Colony, consisting of 1,925 acres, which is divided into 95 lots, of 20 acres each. With each lot is sold a perpetual water right for purposes of irrigation.

#### Soloma.

Is about fifteen miles from Fresno. This thriving town now has a population of 500. The country is nearly level, and the Centerville and Kingsburg canal passes through the outskirts of the town. About six miles south of Soloma the third largest town,

#### Kingsburg.

is reached, which is situated a short distance from Kings river, on the line of the Southern Pacific Railroad. This place contains about 600 inhabitants, and is located in a fine agricultural country, level as a floor.

#### Midford.

Is situated 23 miles northwest from Fresno. It is at this point where tourists leave the train and take the stage for Ya Souille valley. The other towns in the county are Centerville, Berthman, and Toll House. The entire population of Fresno county is 12,000.

#### HUMBOLDT COUNTY.

This county is not known and appreciated, as the extent of its territory and the richness of its resources warrant. Lying northwest from San Francisco, 216 miles to Eureka and Humboldt bay, its principal harbor, separated on the north from the Oregon bay by Del Norte county, on the north and east by Skislay and Trinity, on the south by Humboldt county, and on the west by the Pacific Ocean, having more than 175 miles of coast line, and contains an area of 2,211,849 acres,

wherein lands, which are located in the north end of the county, and consist of gold, silver and quartz ledges. Since copper ledges have been discovered in the south, and portion. Coal is also known to exist in portions of the county. The agricultural lands that are being farmed are but a small portion of what might be utilized, and which no doubt will be when it becomes more settled.

The lumbering interest excels all other industries in the county. The average of redwood timber within its borders are about 84 miles in length, and will average twenty miles in width, amounting to about 756,280 acres; this timber will furnish from 50,000 to 100,000 feet to the acre; there are some localities that will produce 1,000,000 feet to the acre. The number of feet of standing redwood is variously estimated by mill men, and the figures given are from seventy to one hundred billion feet.

Humboldt is one of the best watered counties in California. Beginning in the northern part, the largest stream is the Klamath river, which has a course of some 84 miles within the county. The Trinity, the largest tributary, is its south fork, and flows more than 50 miles within the county. Redwood creek has a course of more than 100 miles in the county, and empties into the ocean about 25 miles south of the mouth of the Klamath. Several creeks of less importance also flow into the ocean south of this point. Eel river empties into the ocean four miles south of Trinidad, and has a course from source to mouth, of over 40 miles. Mad river has a course of over 100 miles in the county, flowing in a northwesterly direction, and empties into the Pacific Ocean, just above Humboldt bay. Jacoby creek and Fresh water are small streams of some eight to twelve miles in length, and both flow into Humboldt bay. A little farther south are Elk river and Salmon



Bernardino county immediately south, and Mono north of it. It is almost as much isolated from San Francisco as though it belonged to some other State. This is a country where extremes meet; a country of startling contrasts, such as are to be found nowhere else on the continent; a country of rugged and glaucous peaks, among which are Mount Whitney, Tyndall, Brewer, and others of the Sierras, the most elevated portions of the American continent, with climaxes such as to render an ascent to their summits, from their eastern slopes, almost an impossibility; a country where, to the eastward of these, pointing heavenward, the earth's surface sinks hundreds of feet beneath the level of the sea, (Death valley, which is elsewhere described); a country of beautiful and fertile plains, and, at the same time, of forbidding wastes; a country of almost Arctic frosts and perpetual snows, and torrid, scorching heat. Its principal, and almost only valley capable of settlement for agricultural purposes, is the valley of Owen's river, which takes its water from the Sierras, nearly opposite the headwaters of the San Joaquin, and flowing thence a distance of 150 miles south, where it is lost in Owen's lake. This valley is about 75 miles long, and from two to five miles wide. The principal farming is within this basin; not, however, in the valley of the river proper, but on the numerous small mountain streams flowing down from the Sierras on the west, from which the waters are derived for irrigation, producing wheat, barley, oats, corn and fruits—principally peaches and grapes. Whatever the farmer produces finds ready sale, at good prices, in the immediate mining districts of Inyo, and across the line in Nevada. One of the richest mines on the Coast, known as the Union Consolidated, of the Cerro Gordo district, which lies in the Inyo mountains, forming the eastern wall of Owens valley, has already yielded over \$10,000,000. In the same district are other noted mines, such as Ygnacio, San Lucas, and Palmer. To the south of Cerro Gordo are Darwin, Lookout, and Panamint. The Kearsarge series of mines, the Rex Montes, and other independent locations are situated in the Kearsarge peak, directly west of the town of Independence.

**Independence.** The county seat, situated on the western side of Owen's river valley, with a population of 350 people. In 1880 the whole county had a white population of only 2,838.

The mineral resources of Inyo county are not yet prospected. If railroads should ever tap this county, which, no doubt, soon will be, this sparsely-settled county, with her mountains of silver, her mineral beds of borax, and her ledges of gold quartz will team with industries which, at present, are scarcely thought of. The area of the county is 6,500,000 acres.

#### KERN COUNTY.

Last of the great chain of counties of the San Joaquin valley is that of Kern, bounded on the north by Tulare and Inyo, east by San Bernardino, south by Los Angeles, and west by San Luis Obispo. It derives its name from the Kern river, being named in honor of Linot, Kern, who accompanied Gen. Fremont on his early exploring expedition to the Pacific Coast. Here the valley comes to an abrupt end, being shut off by a high surrounding chain of mountains, forming the main chain of the Sierra Nevada and the Coast Range. The valley portion, although covering nearly 1,000,000 acres, is but a small portion of the county, as the entire area is 5,137,920 acres.

The topography of the county is exceedingly diversified. The chaotic jumble of barren mountains, where the two great ranges unite together with the vast sandy deserts that encompass them on either side, form a confusion of the most forbidding elements of nature. The redeeming feature of Kern is the noble river that leads in the mountains fastnesses of Tulare county, and breaks through the titanic hills, down a deep, precipitous gorge, descending many thousand feet in a few miles, and rolling out upon the plains. As it reaches the val-

ley it spreads into devious channels, making a large delta, which is called Kern island. So capricious is the stream that a slight impediment made it fly off on a tangent, a few years ago, cutting a new channel, whose mouth was 55 miles from that of its original bed. Kern and Buena Vista lakes receive the water of the river, and, in turn, discharge it into Tulare lake. Some of the most productive farms in all California have been made on Kern island, within the past few years, where naught but grass and sage brush formerly grew. This has been accomplished, by means of a liberal expenditure of capital in the construction of irrigating canals, which now ramify all parts of the island. Without irrigation very little would be produced in Kern county. An ample supply of water is furnished by Kern river, which has a drainage area of 2,992 square miles. The annual rain-fall of the valley rarely exceeds three to four inches, which is insufficient to mature any kind of crops. There are a number of large ranches under cultivation and irrigation, the largest being those of Messrs. Haggin & Carr. The present development of the agricultural interests of Kern county is so largely due to the enterprise of these San Francisco capitalists, that, without them, this county would have been in a comparatively wild condition.

There is every indication of the existence of immense reservoirs of petroleum in the western portion of Kern county. The bituminous shales and sandstone formations are identical with those of the oil regions of Pennsylvania and Virginia, and con-

#### LAKE COUNTY.

Some 75 miles due north from San Francisco, is bounded on the north and northeast by Mendocino, on the north and north-east by Colusa, on the south by Napa, and on the south-west by Sonoma, while Yolo corners it on the south-east. Lake is one of the smaller counties of California, having an area of 624,000 acres of surface, and in shape it is nearly a perfect oval.

Lake county possesses certain peculiar resources and attractions which are sure, in time, to make it famous and prosperous. At present it is somewhat isolated, as there are no railroads touching it. Calistoga, the terminus of the Napa branch of the California Pacific, is some twelve miles from the south line of the county, and Cloverdale, the terminus of the San Francisco & North Pacific, is fifteen miles from the west line of the county. The general topography is rolling and hilly. Located in the Coast Range of mountains, Mount St. John, highest point in the county, is situated at the extreme north end, some 4,000 feet above sea-level. Clear lake, which lies nearly in the middle of the county, forms one of its principal features; this lake is about 22 miles in length, with an average of from three to six miles wide, lying from north-east to south-west. The Blue lakes, three in number, are surrounded by some of the finest scenery in the country. Cache creek, clear and sparkling, is the outlet of Clear lake. Putah and St. Helena creeks head in the southern portion of the county. Middle and Clear creeks, two beautiful little streams, empty into Clear lake. One branch of Cache creek

various parts of the county. Fruits of all kinds, such as apples, pears, plums, apricots, peaches, and berries do remarkably well; most of the orchards are young, and just coming into bearing. Ship-raising is one of the principal industries of the county, as the extensive range afforded by the mountains and foothills make it a profitable business. The southern portion of the county is skirted by a semicircle of rolling hills, of a metamorphic, cretaceous rock, rich in deposits of clinalbar. Several extensive quicksilver mines are now being worked. Two of these, the Sulphur Bank and Great Western are extremely rich. There are several other mines that are rich in this mineral. On the west side of Clear lake is Borax lake, where that mineral is found in its mud.

#### Lakeport.

The county seat, is the largest town in the county, and it is situated on the west margin of Clear lake. It contains about 1,200 inhabitants, and is a beautifully and picturesquely situated. About seven miles southwest, is

#### Kelseyville.

In Big valley, one of the finest agricultural sections in the county. This place contains about 600 inhabitants.

#### Lower Lake.

Located about two miles from the lake, is a place of considerable trade, it being the market-place for the Sulphur Bank mine, in the immediate vicinity. Here are also several productive, tin valleys. The town now contains about 700 inhabitants, and is quite a business place.

#### Upper Lake.

About one mile from the upper or northern portion of Clear lake, contains about 350 people. In the extreme south end of the county, on the stage line between Lakeport and Calistoga, the terminus of the C. P. R. R.; and about eighteen miles from the latter place, is the village of

#### Middletown.

A place of some 400 inhabitants, in the vicinity of which are located several of the quicksilver mines. What Lake county most needs is railroad communication with other parts of the State, then this favored district, with its invigorating climate, beautiful scenery, forests of timber, mineral springs, her extensive timber deposits, pastures that afford grazing for hundreds of thousands of sheep, sunny hill-sides, the natural home of the grape, fine fruit and vegetable lands,



HUMBOLDT LOGGING RAILWAY. View taken Oct. 8th, 1881. Contents of Train 100,000 feet of Redwood, log scale.

siderable oil exudes from the surface in hundreds of places. At one point petroleum has been collected from springs to the extent of several thousand barrels, which is of a heavier and less volatile character than the hydrocarbons of the East. Asphaltum also covers thousands of acres of land. This oil belt runs through Los Angeles, Ventura and Santa Barbara counties, where it has been developed to some extent. Kern, for so large a county, is but sparsely settled, the census of 1880 showing 5,600 people. At the present time the population probably amounts to 6,000.

#### Bakersfield.

The county seat, is the principal town in the county, and lies 306 miles south-east from San Francisco. It is situated in a grove of large cottonwood, sycamore and willow trees, on the sandy bottom, adjacent to Kern river, and about one mile west of the Southern Pacific Railroad. It has a population of about 1,000. The second largest town in the county is Sumner, the railroad station for Bakersfield, and claims a population of 200 inhabitants.

Caliente was a town of considerable importance during the time of constructing the railroad, but its glory has faded and its houses have mostly been removed elsewhere.

Tehichipi is at the summit of Tehichipi pass, on the railroad, and has considerable interests in lumber, wool and marble, of which a rare variety has recently been found.

Mojave, 370 miles south from San Francisco, is in the great Mojave desert, on the eastern side of the mountains. Stages leave this point for Independence, Inyo county, 150 miles distant.

heads up in the northern portion of the county, and has a course of some 25 miles within its borders. There are numerous other small mountain streams.

Lake county abounds with mineral springs, the waters of which possess great medical virtues. Bartlett's, Highland, Furber's, Pearson's, Sigle's and Anderson's are best known abroad, but there are a dozen others whose waters are very fine, and which will become famous in time. The agricultural portions of the county are Clear lake valley, Big and Long valleys, on either side of the lake, and Scott's, Cobb, Coyote, Lower Lake, and Morgan constitute the principal valleys of the county. They embrace, in all, from 80,000 to 120,000 acres, comprising the very best land for wheat, barley, oats, potatoes, and vegetables of all kinds. These valleys are well watered, and there is never any occasion to call upon artificial means to insure good crops. Farms generally do not exceed 500 acres in extent. The hills that surround these valleys are composed of the best of soil for grapes, and wherever, especially in southern Lake, experiments have been tried, the vines have proved very hardy, productive, and remunerative. The mean temperature of the climate is higher, and there is less early and late frosts than in some other vineyard counties of California. So great are the capabilities of Lake county in this industry, that the attention of capitalists are already being directed to it, and this year a large acre has been planted to vines, by the California Improvement Company, a corporation which has done much to develop the resources of the county. This has attracted the attention of other land-owners, who are making extensive preparations for planting thousands of acres to vines in

lands that are cheap, will become known. When we consider the natural advantages of Lake county, we are compelled to believe her future prospects are very bright. This is yet a comparatively new county, and many of its resources are but partially developed; yet it is so near San Francisco, the great commercial center of the Pacific Coast, that when it is once tapped by rail, it will change as it by magic. The census of 1880 gave Lake a population of 6,127, which, at present, may be 6,500.

#### LAGUNA COUNTY.

Was formed, in 1864, from the eastern portions of Shasta and Plumas counties, and joins the former on the west, and the latter on the south, Modoc on the north and the State of Nevada on the east. It has an area of 9,049,000 acres, and is very irregular in shape, being about 105 miles in length, from north to south, and 50 miles in width. This county is an encosure of mountain ranges and valleys, and has a general trend to the south-west and north-west, interspersed with numerous beautiful lakes, the largest, located in the south end of county, is called Honey lake, and is situated in a beautiful valley of the same name; this valley is 45 miles in length, with an average width of ten to fifteen miles, and embraces the principal farming land under present cultivation. Lung valley lies in the extreme north-east of the county. In the extreme north-west corner, and extending into Modoc county, lies Big valley, a large stretch of agricultural land, containing, in Laguna county, about 75,000 acres, which is well watered by Pitt river, Ash creek and a number of smaller streams. Between Big and Honey lake valleys lie Grasshopper, Willow



creek, Eagle lake and Horse lake valleys, separated from each other from the main valleys by intervening ridges of various heights. Each of the last-named valleys are small and mostly occupied by the bodies of water from which they derive their names. In the eastern central part lie the Modoc plains, a large level tract of land, at an altitude of 5,200 feet, which, at some remote period, was the bed of a lake. It is about 15 by 15 miles in extent, and, at present, is nearly covered by a dense growth of sage brush. The only natural source of irrigation appears to be the springs about its edge, where there are excellent stock ranges, the surrounding hills being covered with bunch grass, affording abundant feed. The average altitude of the valley lands are 4,000 feet and over, while the mountains are from 8,000 feet down. The whole county is of a lava formation, but this is not perceptible upon the surface, except in particular localities. The soil is generally fertile.

The timber belt of the Sierras extends into the western portion of the county until they fall below the timber belt. This timber, consisting of pine yellow and sugar, spruce and fir, is an immense source of revenue, and will in time, when the railroad reaches the county, be valuable. At present, it is somewhat isolated; Reno, Nevada, on the C. P. R. R. is the nearest point, which is 30 miles south-east from Susanville, the county seat of Lassen. A line of railroad has been surveyed from Reno, north through Lassen and Modoc counties, California, into eastern Oregon, which, when built, will open up a fine agricultural and timber country.

#### Susanville.

The county seat, is beautifully situated on a slight plateau in the western end of Honey valley, and has a population of 600. The United States Land Office, for the north-east district of California, is located here, which adds considerable to the importance of the place. Stages connect (daily) this place with Reno, Nevada, also to Alturas, Modoc county, and a tri-weekly to Oroville, Butte county.

#### Milford.

Twenty-five miles from Susanville, on the Reno road, and in the lower end of Honey lake valley, has about 300 inhabitants. Opposite the town, and across the lake, which is about ten miles wide, there is an extensive stretch of bay country. In the immediate vicinity of the town are as fine orchards as can be found in the State. The climate here is peculiarly adapted to the raising of fine apples, pears, peaches, plums, grapes and other fruits.

#### Jacobsville.

Midway between Susanville and Milford, has about 350 inhabitants. A few miles away, and within the same voting precinct, is the small town of Buntingville, surrounded by some of the finest farming lands in the county.

#### Johnstonville.

Eight miles further up the valley, on Susan river, has a population of 300. As it is only four miles from Susanville, it may be considered an adjunct.

#### Bieber.

A small town in Big valley, near Adin in Modoc county, and about 25 miles from Hayden hill, has several hundred inhabitants. It is a depot of supplies for the mines of Hayden hill; these mines consist of a decomposed quartz, which are proving to be very rich. The mines at Mountain meadows, on the divide between Plumas and Lassen counties, are said to pay well.

Lassen is not without her hot springs, which are located in Honey lake valley, 20 miles from Susanville; from the latter place, on a clear frosty day, steam can be seen hanging over them in clouds. Black Butte, an extinct crater, located on the line between Lassen and Shasta counties, is a peculiar natural phenomenon; it rises almost perpendicular, in the shape of a frustrum, to a height of 472 feet, with a width of 750 feet across the top. The plain surrounding it is covered by volcanic scoria, ranging in size from a robin's egg to fine dust. Numerous small lakes dot the surface, but for which, the county would appear a scene of desolation. Lassen county should have a prosperous future, as it has at least a million acres of fertile land susceptible of cultivation. At present, it has only about 3,500 inhabitants, the greater portion of whom are scattered on the farms in the various valleys; this accounts, in some measure, for the smallness of the towns.

#### LOS ANGELES COUNTY.

An attempt to give a minute description of a country that has the great range of mountains, valley, soil, climate and natural advantages that Los Angeles possesses, in an article limited to space to this, would be simply impossible. This amount of space could easily be used in describing one valley section alone. Los Angeles is by far the most important county in southern California on account of its peculiar and many natural advantages. It is the most southerly county in the State save that of San Diego. Its entire southwestern line borders on the ocean; on the east it is bounded by San Ber-

nardino, on the north by Kern, and on the west by Ventura counties. It has an area of 3,980,000 acres of surface, the Coast Range of mountains running diagonally through the county from a northwesterly to a southeasterly direction, dividing the county into two equal parts. The most productive portion lies in the southern part of the county. In the mountainous portion of the county are numerous valleys, each one being different in climate, as well as many different qualities of soil. The city of Los Angeles, which is the largest city on the coast south of San Francisco, is also a great railroad center for all southern California and Arizona. The transcontinental Southern Pacific, with branches leading out in various directions—one directly west to Santa Monica, another south to Wilmington, still another southeast to San Diego, besides the overland road east via San Bernardino; all these roads being dotted along with prosperous towns and villages, making Los Angeles the great commercial center of this whole southern country. We will simply enumerate the different valley sections of the county, presenting them in such a shape as to make their geographical relation to each other better understood, noticing a few of the principal features in each. Passing over the Southern Pacific Railroad, one enters the county near the northwestern corner of the Mojave desert, and traveling south will see to the east this desert reaching in an almost unbroken plain to the far waters of the Colorado river, whilst to the west there appears the foot-hills of the Tejon mountains, embracing within their hills the Lake Elizabeth section. In the vicinity of this lake are a number of small valleys. Continuing southward through the Sole-

1,800. It will, no doubt, some day in the near future, become an interior city of considerable importance, as it is situated in a thickly settled country. Between Los Angeles and Santa Ana is Anaheim.

Settled by the oldest and most noted colony in the history of the State. Situated in an agricultural section that has greater possibilities of similar area than any county in the State, the land is all irrigated from large ditches taking the water from the Santa Ana river and from the numerous artesian wells, furnishing an inexhaustible supply of water. The whole county is subdivided into 20-acre farms and upwards, and for the cultivation of the orange, lemon and lime, the land about here is unsurpassed. The settlers are principally Germans, who cultivate every foot of land, and it is really astonishing to see what a few years of well directed energy will accomplish in this wonderful country. A few years ago, before water was introduced on to this land, it was a barren plain, and as devoid of vegetation as a barn floor. At present there are orange orchards bonding beneath the weight of fruit, bearing vines of every variety, also every variety of northern fruit, such as apples, pears, peaches, etc. The agricultural products are corn, barley, rye, beans, potatoes, onions, hops, flax, etc. The other towns in the southern portion of the county are Westminster, Garden Grove, Easton City, San Juan Capistrano, and Norwalk.

#### Westminster.

Six miles west of Anaheim, is a thriving place, and is noted for the number of its artesian wells—about 400. Garden Grove, about three miles from Westminster, is surrounded by land that produces im-

#### MARIN COUNTY.

Is situated on the north side of the Golden Gate, and is bounded south and west by the Pacific ocean, east by the bay of San Francisco and San Pablo, and north by Sonoma county; it is irregular in shape, and has an area of 337,196 acres of surface; 331,439 acres of this is upland, while 12,975 acres is swamp and overflowed lands along the bays and estuaries and 12,790 acres is tide land, which will, some day, be leveled in and become very valuable. The surface of the county is mostly broken and hilly, and a great deal of it is composed of high and sharp rugged hills, which, in several instances, attain elevations sufficient to entitle them to be denominated mountains. Notwithstanding its hilly nature the land is very valuable. The prevailing winds of summer come from the sea and pour upon the hills and valleys, in the western and southern parts of the county, a constant stream of moisture, in the shape of fog, which keeps the grass green long after it has withered and died in the interior parts of the State. As a consequence, this section of green grass is sought after by dairymen, who would keep up their supply of fresh butter. Hence, at an early day, Marin county was and is now occupied by the most skillful dairymen in the State. The population of the county, in 1880, was 11,307, besides the inevitable Chinese, numbering about 1,500, who are largely engaged in the fisheries along the shores of the bays.

The highest elevation in the county is Mount Tamalpais, which is 2,693 feet above the level of the sea, and from its peak (which is easy of ascent and only from six to eight miles from San Rafael, the county seat), on a clear day, may be had the finest view of the Golden Gate, the broad waters of the Pacific, the entire surface of San Francisco bay, besides eight or ten towns, cities and villages around this, one of the finest harbors of the known world.

There is very little farming land in the county. The soil, in the small valleys, is usually of a black, loamy nature, and is excellent for vegetables. On the rolling lands, the soil on top is mostly of a black adobe nature, mixed with gravel and soft clay subsoil, and is very productive of the natural grasses. Lands used for dairying are never plowed. There is none of the cultivated grasses, common in the East, as red and white clover, timothy, red-top, etc.; in their places, are the native grasses, better adapted to the country, and are known as bunch grass; they spring up at the beginning of the rainfall, in November, and continue to grow during the winter months. If the winter is open as it usually is, there is good pasture for stock, with but little use of cured feed. The hay used is oats or barley; small portions of land is sowed in grain each year, which is cut, with the mower, before maturity; it makes excellent hay. In the small richer valleys, crops of beets are produced, which are fed with dry feed.

#### San Rafael.

The county seat, is situated fourteen miles from San Francisco, and has about 2,000 inhabitants. It is beautifully situated in a basin east from Mt. Tamalpais and is connected by the S. F. & N. P. C. R. R., which runs north the county terminating at Duane Mills, in Sonoma county; the company also have a line of ferries, which cross the bay, a distance of twelve miles. The climate is unequalled for health, and is the home of many San Francisco business men. Many thousand people, during summer months, resort to the vicinity for picnics.

#### Sausalito.

Six miles from San Francisco, is connected by ferry, making four trips per day. It is built at the base, and on the slope of steep hills, and is the principal depot for the N. P. C. R. R. Sixteen miles from San Francisco and is connected by ferry, the N. P. C. R. R. and the S. F. & N. P. R. R.

#### Tombala.

Fifty-five miles from San Francisco on the N. P. C. R. R., is the center of the principal farming and dairying country of the county, and contains about 100 inhabitants. Nicastro, Novato and Glenora are small stations along the railroad. Belmar, on a bay of the same name, near the coast, commences with San Francisco by sailing vessels. The bracing climate, cheap living and fine scenery make Marin a desirable place for city people to spend their summer vacation.

#### MARIPOSA COUNTY.

Is triangular in shape, with its north side bounded by Tuolumne, its south by Fresno, while Merced lies at its western base. It has an area of 988,000 acres, the greater portion of which is mountainous and hilly, and is remarkable as containing Yosemite valley, which has been fully described elsewhere. The topographical features strangely resemble El Dorado, Anasim and Calaveras, as it occupies nearly the same position on the western slope of the Sierras; its eastern portion is above the snow line and its western border extending into the great San Joaquin valley. It is watered by the Merced river, and its tributaries, and by the Mariposa



SCENE ON THE SACRAMENTO NEAR MARTINEZ.

dad range of the Sierra Madre, on a steep descending incline, and passing the mining camp of Soledad twenty miles to the east, the upper end of the Santa Clara river is reached, to the town of Newhall. Onward south, but now ascending the north face of the San Fernando range, the road passes through the petroleum district, through San Fernando tunnel, on a steep down grade, to the head of San Fernando valley, which is the fine agricultural section. Here is located the old mission of San Fernando; immediately around it are the oldest and largest olive orchards in southern California. Passing on in a southeasterly direction across the San Fernando plain, we soon come in sight of

#### Los Angeles City.

Which, at present, has about 15,000 inhabitants. Los Angeles is one of the oldest settled places in the State; the old Mexican portion of the town with its tile-covered adobe buildings, may still be seen in the upper portion of the city. Los Angeles is surrounded with one of the finest fruit sections in California—principally semi-tropical; such as oranges, lemons, limes, peach grapes, olives, etc. The city contains many handsome public and private buildings. As Los Angeles is a great railroad center, it contains many large wholesale houses which have an extensive trade throughout southern California, Arizona and New Mexico. Passing on south through almost one continued orange and semi-tropical fruit region a distance of 32 miles brings us to the second largest town in the county, that of

#### Santa Ana.

Situated in as rich an agricultural and fruit country as there is on the coast. It is on the line of the railroad between Los Angeles and San Diego. This bustling little city now has a population of

mense crops of corn. Tustin city is situated two miles east of Santa Ana. Grange is a pretty place, and very aptly named; orange groves cluster thickly all around the settlement. San Juan Capistrano, 33 miles south from Santa Ana, is famous chiefly for the possession of a picturesque old mission, built in 1776. The celebrated Black Star coat mine is twelve miles east of Anaheim. Bee-keeping in the neighboring mountains is quite an industry. The canyons are crowded with bee ranches, producing large quantities of honey.

From Los Angeles east via the Southern Pacific Railroad, a short distance, brings us to San Gabriel valley, one of the finest sections in the county. A few miles from the railroad is Pasadena. From here southwest to the Santa Ana Rancho in the east, a distance of fifteen miles, the country has become almost one unbroken vineyard and orange orchard. To attempt its description would occupy too much space. Some five miles east brings us to the villages of Savannah and Lexington, the beautiful colors of El Monte settlement. Duval City and Gospel Swamps are noted for the best corn-producing in California. Still further east takes us into San Jose valley, watered by San Jose creek; this is also a fine agricultural section. The next station east is Pomona, the eastern limit of the county, which is quite a large village. There are many other valleys and settlements peculiar to themselves, which we can not mention for want of space. Los Angeles had a white population, in 1880, of 33,375, which has largely increased within the past two years, and at the present writing, it has no less than 40,000. Taking into consideration the diversified soil, valleys, foot-hills, elevated plains, and fine, genial climate, we must say Los Angeles has a bright future!



both rivers rise in the county; the first, by the time it joins the San Joaquin, is quite an important stream, flowing over precipices and through deep canyons, until it reaches the western boundary of the county. Mariposa is one of the best timbered counties along the western slope of the Sierras, which consists of excellent saw timber, such as several species of pine, spruce, fir and *Sequoia* or big tree timber.

This is, strictly speaking, a mining region—principally gold. There are probably more gold-bearing quartz veins than are to be found in any other territory of similar size in the State. A large portion of it is not yet prospected. Twenty-six quartz mills are within the limits of the county. The placer mines have been fabulously rich in coarse gold, and the precious metals taken from the Mariposa mines would figure up in the millions. Some of the principal mines in the county are the Washington, near Hamilton; the Ferguson, on the Merced river; Maxwell, Mary Harrison, Malvina, Putosi, Marble Spring, Martin, Wailing, Virginia, Penon, Blanco and Crown Lead, all in the vicinity of Coulterville. The Hiter's Cove is one of the best paying in the county. Bull creek is a section of mining country, about eighteen miles above Coulterville, and includes quite a number of gold-bearing quartz veins, which, as a whole, are known to be rich in gold, and are likely to be worked in time. The Georgia Point, and a number of others we do not now recollect—all valuable—are worked to some extent.

The soil, in the valley portion of the county, is usually fertile, and adapted to limited farming—especially where water can be had for irrigation—principally fruit, vegetables and grasses. Fruit and grapes raised here, in the small valleys in mountains, have a peculiar fine flavor. Sheep raising is quite an industry in this county.

#### Towns.

Mariposa, the county seat, lies 185 miles southwest from San Francisco, and contains about 700 people. Hornita—an old mining town, on the stage road between Merced (on the S. P. R. R.) and Mariposa, and about twenty miles from the latter place—is situated in a fine mining country. While the neighborhood is dotted with quartz, a number of small ranches, farms and gardens raise a sufficiency of cattle, hogs, barley, hay, vegetables, etc., for home consumption. Coulterville is also a mining town, situated about 25 miles from Mariposa, on the Merced river; though surrounded by a vast quartz region, it is not without a number of small farms, orchards and gardens.

The county contained, in 1880, a population of 4,389, but amounts, at the present writing, to 4,500. The climate, especially during the summer months, is salubrious, and the scenery grand and picturesque; vouchered by thousands of tourists, from all parts of world, who visit the famed Yosemite annually.

#### MENDOCINO COUNTY.

Is in the northwestern portion of the State, the third county from the Oregon line, and lies lengthwise along the waters of the Pacific ocean, between Humboldt and Trinity on the north, and Sonoma on the south, bordering on Tehama, Colusa and Lake counties on the east. It has an area of 2,280,000 acres, and the surface of its territory is quite mountainous and broken, the Coast Range occupying its entire extent, some of the highest peaks reaching 4,000 feet. Mendocino is one of the best watered counties in the State by innumerable streams, among which is the Russian river, flowing through the southern part of the county, forming quite an extended valley within its borders. Eel river, which also waters very valuable agricultural lands, including Eden valley, rises very near the source of the Russian river, and flows north entirely through Mendocino and into Humboldt county. Besides these rivers are the Navarro, Walhalla, Albion, Noyo, Rio Grand, Garcia, Ten Mile and Little rivers, (?) with Salmon, Greenwood, Pudding, Alder and Brush creeks, all good-sized streams. The great wealth of this county is in its redwood timber, of which it has almost an inexhaustible supply. This redwood timber belt extends all along the coast, reaching back from eight to twelve miles, and in some instances along the streams farther into the interior. A number of the streams flowing into the ocean afford very good harbors at their mouths for steamers and coasting vessels during a greater part of the year. Among the most prominent points upon the coast are Point Arena and Point Cabrillo, while the most important islands, which in some cases are beautiful sheets of water, and in nearly all affording safe and commodious shipping points to the coasting trade, are Shelter cove, Chifley's cove and Ferguson's cove. An immense amount of lumber is shipped from these points annually. Some of the largest saw mills on the coast are located in this timber belt, and no less than six different local railroads are in operation, engaged in the lumber trade. Among them are Salmon Creek Railroad, Mendocino Railroad, Casper Creek Railroad, Gualala Railroad, Noyo & Pudding Railroad, and Albion Railroad. Twenty-four saw mills are in operation along the coast, with capacities to cut from 5,000 feet to 75,000 feet daily. Over 400,000 railroad ties and several hundred thousand fence posts were

shipped last year to San Francisco, besides large amounts of shingles. Considering the mountainous character of Mendocino, its showing as to agriculture is most excellent, and many of its numerous valleys along the water-courses are among the most fertile spots in the State, producing large amounts of cereals, hops, potatoes, hay and vegetables. A great portion of the county is still Government land. The S. F. & N. P. R. R., from San Francisco to Cloverdale, within a short distance of its southern line, furnishes communication for the Russian river valley, and stages run daily from the latter place to

#### Ukiah.

The principal town and county seat, situated in Russian river valley in a fine agricultural country, 31 miles from the terminus of the railroad. It has a population of 1,200. It is in the central portion of the county, and is the depot for the exportation of large amounts of wool, hops, and various kinds of farm products. The climate is delightful, the location pleasant, and the town prosperous. The second largest town is

#### Mendocino City.

Located on the coast 55 miles northwest from Ukiah, its communication with San Francisco being principal

The population for 1880 was 5,500, which may have reached 6,000 at the present time. Fully three-fourths of the land is susceptible of cultivation, the remainder being suitable only for grazing. In seasons of abundant rainfall excellent crops are matured, the yield of wheat, in some classes of land specially adapted to its growth, being frequently as high as fifty bushels to the acre. The general failure of crops in a season of little rainfall, points forcibly to the necessity of providing a thorough system of irrigation, and it is gratifying to note that the lessons of the past, in this regard, are not unheeded, as the farmers have organized various irrigating enterprises on a large scale, the value of the irrigating ditches, according to the Assessor's report, showing \$12,750 for last year which have been largely increased the present season. The geological formation of the country is such that flowing water from Artesian wells may be obtained at a depth of from 250 to 300 feet. Numerous wells have recently been successfully bored in the region along the San Joaquin river, which flows through the county in a northerly direction, dividing the county into two nearly equal parts. The river here is a fine stream, 100 yards wide, and, for a mile or two on either side, the land is known as



SALMON FISHING ON EEL RIVER—Casting the Net.



HAULING IN THE NET.

pally by steam and sailing vessels. The town has 900 people, largely interested in the lumber trade.

#### Point Arena.

Is a town of 500 inhabitants, and is situated on the coast. There are a large number of small towns in the county, such as West Port, 500; Casper, 500; Willets, 400; Coveta, 300; Chifley's cove, 350; Albion, 200; Gualala, 200; Kibbenlah, 200; Hopland, 100; Calpella, 150; Calito, 50; Ponto, 50; Centerville, 75; Beaville, 50; Little River, 150, and many other smaller places, such as Are, Anderson, Big River, Bridgeport, Big Rock, Buchanan, Bales Landing, Blue Rock, Christine, Compiche, Carroll, Casper, Cottonbee, Eel River, Galtway, Oarria, Hot Springs, Lima, Long Valley, Manchester, Oriental, Potter Valley, Sherwood, Senal, Willow and Yorkville. The population of the entire county at this time is fully 14,000, and is fast settling up, as there is a large amount of cheap land, and the capabilities of the county are sufficient to support ten times its present population.

#### MERCED COUNTY.

Is bounded on the north by Stanislaus, east by Mariposa, south by Fresno, and west by Santa Clara and San Benito counties, and it reaches the summit of the Coast Range on the west to the base of the Sierras, on the east, an area of 1,155,336 acres, embracing the whole width of the San Joaquin valley.

loun, almost perfectly level. Lands in the southern part of the county are rolling and hilly, the soil in many places being a rich loam, but crops are uncertain on account of the light rainfall in this locality. On nearly all the settled places are found orchards of peach and pear trees and a few vines of different varieties, but only along the Merced river are these in any way extensive. Grapes of every variety grow as well here, along the eastern portion as in any part of the State.

Timber, for firewood, is obtainable from the foothills of both mountain ranges, from the river bottoms, and from drift brought down the various streams. On many farms are fine, spreading oaks, growing chiefly along the banks of streams, which, apart from their commercial value, lend a charm to the otherwise treeless plains. Lumber for building is brought from the river and from the mountains. In many places stone is found convenient for building, and material for brick-making abounds everywhere. Farming is carried on with all kinds of labor-saving machinery; gang-plows are in universal use, the soil being broken from two to four inches deep. Combined headers and threshers are used to harvest the grain.

Merced falls, which are 22½ miles from Merced, pass a water-power capable of running a vast amount of machinery.

#### Merced City.

Is the county seat, and is beautifully situated on the S. P. R. R., 151 miles southeast from San Francisco. It is surrounded by a body of fine farming land, and is centrally located. In addition to the trade of the vicinity it commands a large mountain traffic from Mariposa county. Merced has, at present, a population of 1,700. The second largest town in the county is

#### Snelling.

The former county seat, beautifully situated on the Merced river, embowered in trees, and surrounded by fine farms. Its settlement dates from 1851, though the town was not regularly laid out until 1856, when it became the county seat, which, however, was removed to Merced City when the railroad was built. Snelling is situated on the Stockton and Mariposa wagon-road, sixteen miles from Merced. It now has a population of 150. The other towns in the county are

#### Phinsburg.

A railroad shipping point, ten miles south of Merced, which has large grain warehouses and about 100 inhabitants; Alloune, also a railroad station, of perhaps, 50 inhabitants; Crescove station, another grain shipping point, on the railroad; Altwater, six miles north of Merced, a grain shipping point; Los Banos, a Spanish town on the west of the San Joaquin river, containing a population of 100 people; Central Point, and Hoopon.

#### MODOC COUNTY.

In the northeast corner of California, bounded on the north by Oregon, east by the State of Nevada, south by Lassen, west by Siskiyou counties, California, we find the only county in the State lying in a four-square section. Modoc has an area of 2,750,000 acres, and is known as high table lands. Along its eastern borders, lying between a range of mountains, we find a chain of lakes extending nearly across its entire width known as Upper, Middle, and Lower lakes. These lakes are from two to four miles wide. The southern two are united by a narrow strait; the northern or upper one is several feet the highest. One peculiarity about these lakes is that in 1851, when Peter Lassen, the old pioneer, passed through this country, these lakes were dry. About eighteen miles west from the northeast corner of the State is Goose lake, extending into Oregon. This lake is about 30 miles long from north to south, and some ten miles wide. In the northeast corner is Rivett lake, lying mostly in Siskiyou county. A few miles to the east is Clear lake, some three to five miles in extent. The entire county is a succession of hills, mountains and valleys, the Warner range in the eastern portion of the county being by far the most extensive. Between this range and the chain of lakes is a beautiful fertile valley watered by numerous streams. Considerable timber, such as pine, cedar, juniper, laurel and tamarack, abounds in the neighboring mountains. The Reno and Fort Bidwell stage roads lead through the valley, and the principal farming in the county at present is along the road. This country has been settled only some eighteen years, yet there are four moderate-sized towns in the valley. At the south end is Eagleville, situated in a fine farming section, and containing nearly 400 people. Sixteen miles further north is

#### Cedarville.

This village is supported by a rich and fertile agricultural country. The town has some 350 people, and is in a flourishing condition. Ten miles to the north, on the same road, is Lake City, situated on Mill creek, surrounded by a long stretch of meadowland, and very productive. Sixteen miles farther north at the head of the valley is Fort Bidwell, which has several hundred inhabitants. All the goods and merchandise for the valley are landed by train from Reno, Nevada, a distance of 175 miles.

#### Altaville.

The county seat, is situated near the eastern end of Hot Spring valley. This valley takes its name from a large hot spring which throws up the water five



or six feet high. The valley is about fifteen miles in length, by six in width. To the north is a vast stretch of table-land, known as the Devil's garden, on account of the surface being literally strewn with scoria and volcanic matter. This valley is watered by several branches of Pitt river (one of the largest tributaries of the Sacramento), uniting at Allura, presenting a fine location for the town, which has a population of 500 people. It is 48½ miles north from San Francisco. The country known as the lava beds, embraces a large portion of the northwestern corner of the county. It is a succession of gulches and crevices which range from a few feet to 100 feet in width; some have subterranean passages which lend for miles under the rocks. This singular country extends eastward to Goose lake, which has no arable lands, and it is fit only for grazing.

The valley, situated in the southwest corner of Mono, is some 25 miles in length, and nearly as wide. It is watered by Pitt river and numerous creeks. The soil of this valley is as valuable as is the formation of the county itself. The valley has only been settled some ten years. The village of Ash, which now has 400 people, is located on Ash creek near the eastern side of the valley. Goose Lake valley, lying on the eastern side of the lake, is a fertile and well-watered country, surrounded by fine bodies of timber, principally cedar and pine. Surprise valley is divided from Goose lake and Hot Spring valley by the Warner range, the valley extending north and south for nearly 100 miles, and being from six to twelve miles wide. There are a large number of small valleys throughout the county with plenty of good Government agricultural and timber land. Mono county had a white population, in 1880, of 4,383; but would number 5,000 at present. This is considered one of the best stock-raising countries on the coast.

#### MONO COUNTY.

A long and narrow country, lies along the extreme eastern side of California, with its eastern line bordering on the State of Nevada for a distance of 135 miles; Inyo borders it on the south, with Fresno, Tulare, and Alpine counties on the west. Mono is triangular in shape, and has an area of 1,790,000 acres. The western portion lies among the tall peaks of the Sierras, some of the tallest of which are Mount Dana, 13,627 feet; Mount Lyell, 13,217 feet; Castle Peak, 13,000 feet, and many others of lesser note, whose peaks are covered with perpetual snow. The eastern portion of the county, which is usually spoken of as a strange, mysterious country, is of a desert-like, volcanic character, abounding in salt pools, hot springs, geysers, sulphur springs, and extinct craters of volcanoes. A number of volcanic cones, all having extinct craters, lie in the southern part; a great portion of this district is volcanic debris, consisting of porphyry, granite, limestone, and remarkably pure obsidian. The fires of some of these ancient volcanoes may not be all extinct, for upon the islands in Mono lake jets of hot vapor escape amid a number of boiling hot springs. This lake is situated in nearly the center of the county, and at present, is about fifteen miles long by ten miles wide. The great bluffs and rocky ravines of the Sierras come almost to the eastern shore of the lake, while on all sides deposits of salt and driftwood mark the plain, showing very distinctly that the waters of this wonderful lake were once nearly 1,000 feet above their present level, and spread over vast plains, which are now bare. This, no doubt, was at one time a great inland sea; it receives the waters of a number of small streams, but is without a perceptible outlet. Owen river, which is quite a stream, in the south, and Walker, in the north, are the principal rivers in the county. The former passes through the southern part of the county, and the latter through the northern part. Among the mountains in the north-western part of the county, there are a number of small elevated valleys which constitute the principal agricultural, or cultivated lands of Mono. The eastern part of the county is of an alkaline nature, with volcanic traves, of a mineral character, almost entirely unimproved.

The mineral resources consist principally of gold and silver, but copper, zinc, iron, Jasper, and other minerals are known to exist. The development of a great number of silver veins has been carried on since 1867. The principal districts are Bodie, Castle Peak, and Blind Springs, and mills and reduction works have been established in all. Gold and silver are found in equal quantities.

#### Boats.

The principal town in the county, is strictly a mining town. Its altitude is over 9,000 feet—higher than any other town in the United States. The distance from San Francisco via Reno and Carson,

is 438 miles; the last 113 miles of the journey are by stage. A few years ago Bodie was quite a city, having a population of about 7,000; it now has but 5,000. Considerable mining is carried on around Bodie. The climate is considered healthful; considerable snow falls in winter, and the summers are always cool and delightful.

#### Bridgeport.

The county seat, is situated in the northern part of the county, on the eastern fork of the Walker river. It is in an extensive valley, of fine agricultural lands, known as Big Meadows. Bridgeport contains several hundred inhabitants, who depend mainly upon the mining interests for support. It is 117 miles from Carson City, and is reached by stage.

#### Benton.

The third largest town, lies 70 miles southeast from Bridgeport; Mammoth City, in the south-west, is a town of nearly the same size; the lesser towns are Coleville, Dexter, Dogtown, Bishop's Creek, Monoville, Montgomery, Oasis, Porterville, and Roachville. The census of 1880 gave Mono a white population of 7,439. In addition to the mineral resources of Mono, there are large forests of timber, consisting of several species of pine, fir, tamarack, and other varieties of mountain timber. At present there are some 15,000 acres of land made productive by irrigation. The lumber, agriculture, and grazing, on the whole, are increasing.

#### MONTEREY COUNTY.

Lies between parallels 35.45 and 37 north, and is bounded on the north by Santa Cruz county and Monterey bay, on the east by the counties of San Benito, Fresno and Tulare, on the south by San

Diego, and a great portion too rough for grazing. The population of the county is 20,931 and about 300 Chinese, not included. Monterey is well supplied with railroads. The Southern Pacific enters it on the north and runs through the great Salinas valley from Pajaro to Soledad, a distance of 141 miles with a branch from Castroville (which is only ten miles south of Pajaro) to Monterey, sixteen miles.

Moss Landing is located at the mouth of Salinas river where it enters Monterey bay. There are sixteen points in the county where the farmer can ship produce, either by rail or by water. Two and a half miles west from Moss Landing is

#### Castroville.

Situated on the S. P. R. R. at the Monterey Junction. It is regularly laid off and contains at present about 1,000 inhabitants. In this neighborhood is a large area of swamp land which has mostly been reclaimed, making the very best of agricultural land; water is easily obtained at a maximum depth of 20 feet. Nine miles south brings us to the county seat of Monterey.

#### Salinas City.

Is located in the heart of Salinas valley on the Southern Pacific, 118 miles south from San Francisco, twelve miles from tide water at Moss Landing, and eighteen miles from the town of Monterey. It is a young and thriving city, only fifteen years old, and at present contains 2,500 inhabitants. It has one of the finest business locations in the State. The town is well laid out with broad streets the business one having asphaltum sidewalks fourteen feet wide. The town is lighted with gas and is well supplied with water works; it has, altogether, a very city-like appearance.



TEA-GARDEN AT SHANGHAI.

Luis Obispo county, and on the west by the Pacific ocean. It has an area of 2,304,000 acres; the northern line is 90 miles south from San Francisco. There is a great diversity of soil, climate and products, owing to the peculiar manner in which the county is divided by mountains, hills and valleys. It is separated, naturally, into four sections, viz: The Santa Lucia range of mountains, running parallel with the ocean, in the western portion, following the coast line. The Gabilan range in the eastern portion extending from Monterey bay on the north into San Luis Obispo county on the south; these mountains are in most places very rough and steep, especially in the central and western portion of the range; so much so that some parts of the county have not been explored; they attain to a height of 5,000 feet. Between these two ranges lies the great Salinas valley, which upon upon Monterey bay on the north, from which it extends in a southeasterly direction for 75 miles, and from six to fifteen miles wide, and contains 640,000 acres. Through this valley runs the Salinas river from a southeasterly to a northwestern direction, and empties into the bay of Monterey; the principal tributaries to this stream are Arroyo Seco, San Antonio and Nacimiento from the west, and the San Lorenzo and Estrero from the east.

The lands in this valley may be divided into three classes: Rich bottom, good for the growth of anything; table lands, good for wheat and barley; these stand dry weather or a short supply of rain better than any other in the valley; the up-lands, which lie close along the base of the mountains, in the lower part of the canyons and among the lower hills, are good for general farming, stock raising and fruit culture. Fully one third of the county is mountain waste and not susceptible of cultivation.

#### Monterey.

Is situated in a cove at the southern extremity of Monterey bay and thoroughly protected from the rough winds of the Pacific by the range of mountains which extend about three miles to the northward and terminate at Point Pinos. The harbor is one of the best on the coast; the largest vessels can always enter the bay as there is no bar to cross. Monterey is closely connected with the early history of California, and a short sketch may not be out of place here. "The first glimpse we have of this country is from Juan Rodriguez Cabrillo, on his first voyage along up the western shores of this continent in 1542, only 50 years after Columbus discovered America. The mountains, Cabrillo describes in his Journal, along the coast to the southward, were here of higher until he reached the 37th parallel of latitude, when he got sight of the wonderful range of mountains and made note of the fact. Just this glimpse is given us in the Journal of the first explorer, and we see no more of it for 36 years. The next explorer, Sir Francis Drake, sailed along the same track, then there is another silence of 24 years, when Vancouver comes exploring more carefully and searching for harbors, and it is he who finds Monterey bay, arriving here May 16th, 1792, and named this bay in honor of Gaspar de Zanga, Count de Monterey, who was at that time viceroy of Mexico, and who had fitted out the expedition. Then there comes another silence of 50 years, when Charles III, King of Spain, awarded the scepter to the Spanish throne from 1763 to 1780, and Gaspar de Pantoja was California's first governor, being appointed in 1767, and remained in office until 1771. California was then a wild, unexplored country. From 1767 until 1822 California was under Spanish government, and had three dif-

ferent governors presiding over her destinies. Viceroy de Sala being in office when California passed from the Spanish to the Mexican Government for 24 years. While under the latter Government there were nine Mexican governors. Pio Pico was in office from February, 1845, until July 7th, 1846, when Commodore John D. Sloat hoisted the American flag at Monterey, and by proclamation took formal possession in the name of the United States Government, and was the first American military governor of California. The old custom-house is still standing on the beach where the same identical flag-staff that hoisted California's first American flag is still standing in its socket on the northwest corner of the old adobe building, the north end of which was built by Spain, the south by Mexico, and the intermediate by the American Government. Many other places of interest are pointed out to the stranger in this quaint old town, such as the Catholic church built in 1791, nearly a hundred years ago, the altar and inside still being in a fine state of preservation. Here may be seen the old archives, the pure silverware of the church, the old paintings, of saints, brought from Spain a hundred years ago; Colton Hall, where the first constitution was framed, is now used as a school-house. Here may be seen the most complete library south of San Francisco. It was established as early as 1831, and contains about 3,000 volumes of scientific and historical works. Some of these are from the best authors, and very expensive and rare works.

There are many places of interest yet to be seen here. A half mile west of town is Whaler's Point, where a company of Portuguese are still following the avocation of catching whales. Near this point, at low tide, may be seen a portion of the wreck of the vessel that carried Napoleon Bonaparte from off the island of Elba. Four miles south may be seen the old Mission Carmel, the second oldest on the Coast. On the hill, a half mile from town is the old fort, General Halleck's headquarters; the old block-house, the old theater, the first in California, now all in ruins.

But the greatest attraction in all these modern times is the Hotel Del Monte and grounds, the most magnificent structure of the kind on the coast, situated about half a mile east from this quaint old town. This is decidedly the largest, handsomest, and most recently-furnished seaside hotel in the country. Indeed no ocean house upon the Atlantic approaches it in its plan of exterior, while its interior finish, accommodations, and appointments are much superior to those of any like establishment in the United States. It is built in modern Gothic style, and is 385 feet in length and 115 in width, the center being five stories high, with a tower 80 feet; 100 more rooms are to be added early this season. There are three flights of stairs; one at the intersection of each of the end wings and a grand staircase leading from the lobby. The hotel is lighted throughout with gas; pure water is supplied from an artesian well. At a short distance from the hotel are the carriage houses and stables large enough to accommodate 60 horses.

The grounds contain one hundred and sixty acres of a beautifully-wooded, natural park of pine, oak, cedar, and cypress trees; there are thousands of young trees planted. Fine grass plots, azaleas, croquet grounds, choice flowers and shrubs may be seen on every hand, beautiful drives all through the park, and about half a mile west on a gradual descent to the beach are the magnificent bath-houses. A more perfect and desirable bathing place would be hard to find. Here was recently completed the largest bathing establishment of the kind in the United States at a cost of \$250,000, with large hot, cold, plunge, salt, and fresh water baths, and ample accommodations in the bath-houses for 200 bathers. Between the hotel and the ocean is 7,000 acres of land; a more romantic, natural park can not be found in the State. Six drives along the bay and ocean, among the thickly wooded and rocky cliffs are being made. A drive to the lighthouse and through the quaint old town of Monterey will amply repay a journey to this, one of California's historical spots. Monterey boasts of one of the most even climates in the world. The distance by rail from San Francisco is 125 miles; steamer, 85 miles; present population of the town, 2,000.

#### SANTA COUNTY.

Is justly famous for her productive soil, fine healthy climate, which is pleasant the year round—the summers being cool and agreeable, and the winters mild and salubrious. It lies about 50 miles northwest from San Francisco, and is bounded on the north by Lake county, east by Yuba and Siskiyou counties, and west by Sonoma county, and is some 50 miles in length, and about 20 in width, and has an area of 450,000 acres. Like most counties it



California, it is irregular in shape, being longest north and south, and the most southerly part reaches within about 27 miles of San Francisco, with which it is connected both by water and railroad. The California Pacific and Northern Railways enter the county on the extreme southern line, via. Vallejo, thence over the main line of the C. P. R. R. to San Francisco, via. Oakland. This road runs through the central portion of the county to the most western corner, terminating at Calistoga, a distance of 73 miles, 41 miles of which is within the county. The Napa river, an outflow from Suisun bay, is navigable for steamers to Napa City, the county seat, which is 41 miles from San Francisco. The topography of this county is a succession of low mountain ranges and valleys, with a general northeastern and southwestern direction. The principal valley is known as Napa valley, extending through the entire length of the county (beginning at Suisun bay on the southern line), in a northwestern direction up above Calistoga. This fine fertile valley is some 50 miles in length, and from two to eight miles in width; it embraces about 56,000 acres, which is nearly all of the very choicest grape and fruit land in the world. Originally, this valley was dotted with large spreading oaks, having the appearance of a grand park. Large numbers of these trees are allowed to remain, together with thousands of eucalyptus, walnut, locust, and other shade and ornamental trees planted, giving the country a most beautiful appearance. In early times this entire valley was owned by the

lie in Napa county. A large portion of this is wet land along the bay, and is used for dairying. Thus it will be seen that less than one quarter of this county is level land. The remainder is mountainous, ranging in height from the lowest foot-hill to Mount St. Helena, 4,313 feet.

Napa county is justly famous for the numerous mineral springs that are located within her borders. At the southern end of the county, about five miles northeast from Napa City, are situated the celebrated Napa Soda springs, the waters of which have become famous for their curative powers. From the hidden treasury of nature's chemistry, in her subterranean laboratories, a perennial flow of about 5,000 gallons daily is developed—mingling iron, soda, magnesia, lime, and muriate of soda, with free carbonic acid gas, in such happy combination as to impart pleasure, health, and physical improvement as the result of their use. From these springs is poured forth the article so well known in the commercial world as "Napa Soda." The water is bottled and sold, just as it flows from nature's laboratory, with all her sparkling freshness still upon it. The Hot Sulphur springs at Calistoga are also a great curiosity. There are 22 boiling springs, and, chemically speaking, no two are the same. In Pope valley are the celebrated Etna hot springs, where hundreds of health and pleasure-seekers lie themselves annually. Ample and good accommodations are provided for guests here, and the ride over Howell mountain, to and from the springs is as romantic as could well be

#### St. Helena.

An incorporated town of 1,400 people, is situated on the line of the Napa Valley Railroad, eighteen miles above Napa City, and within three hours' ride from San Francisco. The town is supplied with water-works, which furnish an abundant supply of pure mountain water, both for household and irrigating purposes. The beautiful valley is one continuous vineyard, both up and down, as far as the eye can reach. With the bold, rugged mountains on either side, shaded with timber of various kinds, make this one of the loveliest spots on the coast. The town contains many elegant residences and fine churches. The White Sulphur Springs, a beautiful summer resort, two miles south; Crystal Springs, three miles north; Etna Springs, on the east—all have an enviable reputation for health and pleasure seekers. Improved land in the valley is regularly sought for, at figures that might seem high to those unacquainted with the surroundings. Northwest, through the valley, a distance of nine miles, is the terminus of the railroad.

#### Calistoga.

A place of 850 inhabitants. This is also a summer resort, of considerable note.

Midway between St. Helena and Napa, on the line of the railroad, is the village of Yountville, with 600 inhabitants. Oakville is four and one-half miles north, on the same line of railroad. One mile further up the valley, through a fine, improved country, brings us to Stutterford, which is merely a railroad station, in one of the finest locations we have seen in the State.

#### NEVADA COUNTY

is bounded on the north by Sierra, on the east by the State of Nevada, on the south by Placer, and on the

ship; still another, at Round Mountain, a short distance from Nevada City. Prospectors are constantly making new discoveries in various parts of the county. Nevada county has 37 quartz-mills in operation, with an aggregate of over 500 stamps.

The lumber interest of the county is an extensive one, the timber consisting of pine, fir, spruce and cedar. The estimate of standing saw timber yet in the county is about 550,000,000 feet.

The facilities of Nevada county, both for travel and shipping, are excellent. The main line of the Central Pacific runs along the southern line of the entire county, forming a junction with the Nevada county, narrow gauge Railroad at Colfax, 103 miles northeast from San Francisco. The narrow-gauge road, 22 miles in length, was built by private capitalists from Nevada county citizens. The largest city in the county is

#### Grass Valley.

With a population of 6,500, situated on the N. C. N. G. R. R., sixteen miles north of Colfax, and 228 miles north of San Francisco. It is located in a valley 2,600 feet above the sea level, in one of the best quartz-mining districts of the State. The majority of the mines in the vicinity are paying ones; while substantial business blocks and fine residences betoken the large measure of the community's prosperity.

#### Nevada City.

The county seat and second largest city in the county, has a population of 5,500. It is also the terminus of the N. C. N. G. R. R., and is situated on both sides of Deer creek, which flows in a deep canyon. It is spanned by a beautiful wire bridge. Nevada City is a claimant one of the handsomest and liveliest towns in California. The streets, like those of most mining towns, do not run with any regularity; the mines yield regular dividends, and the money is laid out in city improvements.



VIEW OF PORT BLAKELY.

Spanish pioneers, who raised thousands of cattle the entire country being, then, covered with wild oats, and other nutritious natural grasses. We find thirteen Spanish land-grant titles covering nearly the whole of the arable lands in the county. The soil of Napa valley is usually a dark gravelly loam, very fertile, and, during the rainy season, is not muddy like the clay and adobe soils in other portions of California. The lands in this valley are all cut up into small tracts, ranging in size from five, ten, twenty, forty, one hundred, and two hundred acres, and occasionally, five hundred acres. Larger tracts extend up on either side of the foot-hills and low mountain ranges. These hills are also timbered with oak, madrone, pine, alder, and various kinds of mountain timber.

Berryessa valley, the second largest, is located in the eastern portion of the county, and is some eight miles long and from one to three miles in width, embracing about 6,700 acres. The soil and general characteristics of this valley are similar to those of Napa. Between these two valleys, to the northwest, lies Pope valley, which is some eight miles long, and from one-half to one mile in width, embracing 5,000 acres. Chilesa valley, a narrow, productive valley, some ten miles in length, by one-half of a mile in width, in all embraces about 3,200 acres. Conn and Wooden valleys, also in this vicinity, each embrace about 2,000 acres. Capella, a smaller one, embraces from 600 to 700 acres. Besides these, the southern part of the county extends into what is known as Suscol valley, bordering on San Pablo bay. About 16,000 acres of this valley

imagined. Napa county has numerous fresh water springs, and it is considered one of the best watered counties in the State. Beautiful living streams are to be seen all over the county. Among the principal ones are Napa river, running the entire length of the county, and numerous creeks, viz.: Conn, Suscol, Napa, Suscol, Camenas, Rector, Piplah, Ethenra, Pope, Dry creek, etc.

Minerals of various kinds abound in Napa county. The only mining carried on to any great extent is for quicksilver. There are many mines of this character that are now lying dormant, on account of the extreme low prices of the metal. Numerous other minerals, such as talc, serpentine, shale, sulphur, soda, amonite, coal, limestone, gypsum, tufa, and scoria are found. Some of the geological formations of Napa are among the wonders of the world; viz.: the petrified forest near Calistoga, the lava beds, on Mount St. Helena, and the tertiary sandstone.

The great product of this county, and almost the only increasing one, is wine and brandy; the wine crop last year amounted to 2,650,000 gallons. This is one of the wealthiest counties in the State, considering the number of its inhabitants. The census of 1890 gave Napa a white population of 12,200, and a floating Chinese population of from 1,500 to 2,000, besides several hundred Indians.

#### Napa City

Is beautifully situated on the Napa river, at the head of navigation; it is also on the S. F. & N. P. R. R., 41 miles from San Francisco. In the immediate vicinity of the city, the country is level, the soil is rich, thus affording excellent facilities for fine gardens. The city is regularly laid out, with broad streets, which are handsomely shaded. The business portion of the town is built of brick.

by Yuba. Its area is 550,240 acres, and lies high up in the Sierras. The greater part of the county lies from five to six thousand feet above sea level. There are few portions of the world that can compare with it for variety of scenery or climate. The lower districts are little above the level of the sea, and are seldom visited by frost or snow. This county is one of the best watered in the State. It has several beautiful lakes, the most noted of which is Donner lake, situated on the southeastern line of the county. In the northern part of the county are Lake Independence and Webber lake; at the latter, there is a fine summer resort, and a line of stage running from Truckee, on the C. P. R. R., up through some of the finest mountain scenery in America. There are a number of other beautiful lakes up in this region.

Mining exceeds all other industries in the county; here are 381 surveyed claims located on the new and elegant county map recently published by Mr. J. G. Hartwell. The gravel mines were first discovered in 1810. The ridge between the middle and south Yuba is distinguished for its vast and almost continuous lines of gravel hills, extending from the summit in the foot-hills. The deposit of gravel is from 100 to 300 feet in depth, and millions of dollars have been expended in getting the water in pipes and ditches for miles to develop the claims. Among some of the most extensive of the companies are the following: Milson, North Bloomfield, Blue Tent, Onego and Birchoy creek. These, and a number of other private claims, have yielded away up in the millions. The Derby mine, near North Bloomfield, is the leading claim in the county; here the drifting process is employed. Near by is the Wall, where good prospects are being constantly developed. Another important gravel-mining district, with indications of being as rich as any in the county, is being developed in Washington Town-

It is also claimed that it is the healthiest place in California. Two stage lines leave daily for Downsville, North San Juan, Forest City, Grassville, North Bloomfield, Lake City, Comptonville, Marysville, Dutch Flat, and all parts of northwestern California. In the extreme eastern part of Nevada is the third largest town in the county.

#### Truckee.

Situated on the C. P. R. R., on the east side of the summit of the Sierras. It has a population of about 1,200. The town is principally supplied by the numerous lumber interest, and lies 250 miles northeast from San Francisco; it is the place where tourists leave the railroad for Lake Tahoe, eight miles east, along the river, brings us to

#### Hoc.

The largest shipping point, for its size, in the State. Fully 10,000,000 feet of lumber are shipped annually, and also 10,000 tons of ice by the Bora Ice Company. Here, is the celebrated Boca Beer Brewery. In the northwestern part of the county is the fourth town, that of

#### North San Juan.

Which has a population of about 800. It is thirteen miles northwest from Nevada City, in the center of the gravel-mining district. The other towns in the county are North Bloomfield (which is fifteen miles north of Nevada City, situated in the gravel-mining district), Cherokee, French Corral, and Columbia Hill, all little mining camps, located north of Nevada City. The census of 1890 gave Nevada county a population of 20,827, which would reach about 21,000 at this date.

#### PLACER COUNTY

Is located on the western side of the great Sierra range of mountains, northwest from Sacramento, and 176 miles northeast from San Francisco. It is bounded on the north by Nevada and Yuba counties, on the west by



Sutter, on the south by El Dorado county, and on the east by the State of Nevada. A part of its eastern boundary is the famous Lake Tahoe. It was organized by an Act of the Legislature, approved April 25, 1851. Before that time Auburn, which is the county seat, was the seat of justice of the original Sutter county, which then included most of what is now Placer county. In shape this county is nearly a parallelogram, being over 50 miles in length, from north to south, west to east, while its width, just above Auburn, between Bear and American rivers, is very narrow, only about eight miles, and in its topographical features the whole of its territory faces towards the setting sun, extending from an altitude on the plains, in the western portion of the county, of some 40 feet to over 7,000 feet at its eastern boundary line, embracing nearly every variety of climate known in the State. Its area is 95,000 acres.

The mineral resources are extensive and very rich. The gold mines of this section, both placer and quartz, have yielded up in the mid-north, the former, from which the county derives its name, have been worked from the early days of '49. The two divides are distinctly hydraulic sections, and the works are, in many instances, very extensive, notably so around Dutch Flat, Gold Run, Horse Hill, Forest Hill, Bald and Michigan Bluff. Millions of dollars have been expended in getting the water to, in pipeline ditches, from the mountains, and the number of miles of ditches is several thousand.

Drift mining is carried on to some extent, two of the most notable places being at Forest Hill divide, one at Damascus, and the other at Sunny South. The tunnel at the first-mentioned place is in the hill over a mile. There are also numerous quartz bridges being worked and prospectors are continually making new discoveries. Most of the quartz mining is being carried on in the foot-hill section near the towns of Auburn, Ophir, New Castle and Penryn.

The quarrying and dressing of granite is an important item of the wealth of Placer county, there being no finer granite in the known world than the quarries of Penryn and Rocklin. There are several species of granite, the rock at Penryn being much darker than the quarries at Rocklin, but at the latter place it is much rarer worked. Large quantities of this excellent building material are actually shipped all over the coast, and may be seen in the public buildings and works of California.

From the best information we could get while among the people of Placer county, we estimate the standing saw timber, yet in the county, to be 471,000,000 feet.

The farming section proper consists of the average plain land, and embraces the west end of the county. It is not so rich as a soil as most of the valley lands as it is of a granite formation, on which crops of wheat, oats, barley and hay are raised, varying in quantity and quality with the amount of moisture during the season. The foot-hill, or fruit lands, are the most valuable in the county, and extend over about one-half of its territory, and circling around to the north of Lincoln and Sheridan up to Bear river, and from Rocklin southeast towards Folsom, we have the hignest of the foot-hill fruit section. This section is composed of rolling hills, traversed by ravines, and up to within two miles of Auburn, is of a granite formation. This point of the county is the most prosperous, as it is filling up by those who are turning their attention to the raising of fruits and berries.

Placer county has good shipping facilities, as it is crossed by railroads. The Central Pacific crosses the county on the south at Roseville Junction, which is by eighteen miles north-east from Sacramento, the road taking a north-eastern direction to Colfax, a distance of 35 miles, which is the junction of this road and the Nevada County Narrow-gauge road; the Central takes an eastern direction across the Sierra Mountains, following on near the line between Placer and Nevada counties to Truckee, a distance of 66 miles after, where it crosses on northeast through Nevada county. At Roseville Junction is the Oregon division of the Central Pacific, running on north through the eastern portion of the county.

Placer is exceedingly well watered by numerous streams, the largest being the American river, which, in its several branches, affords some of the grandest scenery in the State. The other streams are Bear river, which forms the line between this and Nevada county, and on the east is the Truckee, which is the outlet at Lake Tahoe.

**Auburn.** The county seat, one of the oldest towns in Northern California, has a population of 1,500. The town is located nearly one mile west from Auburn station, on the C. P. R. R., 157 miles northwest from San Francisco. The elevation here is 1,375 feet above the sea level. The greater portion of the land in this vicinity is gold-bearing material, but where water can be had, fruit culture is very profitable, as the location is below the snow belt and away from the fog belt. It is located in a small valley, and, like most California towns, is not laid out with any regularity, but it has pleasant villas, nice shady walks, and fine springs of crystal water. Five miles down towards the valley, we come to

**New Castle.** Which has about 200 inhabitants, who are mostly engaged in the fruit business. The second largest town in the county is

**Dutch Flat.** Located 31 miles east of Auburn. This town is about one-half mile from the railroad, down to a canyon. This has been one of the richest gold-producing sections of the State, and at present has a population of about 900, mostly engaged in mining and lumbering. There is an abundance of water here which has been brought in ditches and pipes at great expense. A daily stage is run from this place to Nevada City, a distance of seventeen miles.

**Colfax.** The third largest town in the county, has a population of about 600. It is located at the junction of the C. P. and N. O. N. G. railroads, seventeen miles northeast of Auburn. A daily mail runs from here to Iowa Hill. Between Colfax and Auburn is

**Clutter Gap.** Where the famous Clutter Gap mine is located; this mine is known to be the best in the market. At

**Lincoln.** On the Oregon division of the C. P. R. R., 29 miles north from Sacramento, are located the extensive potteries of Gladding, McLean & Co. At this place is also a coal mine, which yields very fair coal for steam-engines and other uses. Seven miles farther north, on the same road, is the village of Sheridan, located in a farming region.

**Roseville.** The junction of the railroad, eighteen miles northwest of Sacramento, has a population of 350.

There is a number of other towns in the county, such as Ophir, Alta, Blue Canyon, Emigrant Gap, Gold Run, Forest Hill, Pine, and a host of other little mining camps. The census of 1880 gave Placer county a population of 14,226, which perhaps would reach 14,500 at present. The county Assessor estimates that there are

in the hills; extensive operations are carried on in different places, both by placer and hydraulic methods. Plumas also has a large amount of excellent saw timber, which will become valuable in time. Although there is a small area of level valley land, practicable for farming, yet this industry is quite unimportant. In addition to grain and vegetables, this is quite an important stock-raising county, and an excellent locality for fruit, such as apples, pears, plums, and cherries. As yet there are no railroads in Plumas county, but all the principal towns are connected by stages, which run, in good wagon-roads, to Oroville, Butte county, on the west, and to Reno, Nev., on the east. Nearly all of the north-eastern portion of California can communicate more readily with Nevada than with the western portion of California, on account of the general trend of the mountains.

**Quincy.** The county seat, is situated in American valley, one of the most fertile little valleys in the State. The town is pleasant and attractive, as it is situated in the midst of the Sierras, which are here covered with dense forests of timber. Quincy has a population of 800, who depend equally upon the mining and agricultural interests in this district. It is 65 miles north-east from Oroville, the terminus of the railroad, and is easily reached from Reno, by means of the Quincy & Iron Stage line, which passes through the towns of Long Valley, Jewison, Eureka, Johnstown, Beckworth, and Summit.

**Taylorville.** The principal town, is one of the most prosperous agricultural sections of the county, and contains 210 inhabitants. Meadow valley, with less than 100 inhabitants, has a fine location, several miles from Quincy, on the Oroville road. Summit is a small town, in the eastern part of the county; it lies at an altitude of 7,000 feet.

**Greenville.** In the northern part, is one of the most thriving places

river is the village of Washington, with several hundred more. Sacramento is a great railroad center. Two lines connect directly with San Francisco, one south, through the great San Joaquin valley, and thence across the Coast, via Los Angeles; the Central Pacific goes directly across the mountains; two lines run north through the Sacramento valley, one on each side of the river, the Sacramento and Placerville road leads off into El Dorado. This, besides the navigation of the river for steamers all the year, both north and south, make the shipping facilities second to none in the State. The C. P. R. R. Co. has added greatly to the general improvement of the city. Its immense work shops here employ from 1,000 to 1,500 men, and they have recently constructed rolling mills, where old iron railings is converted into bars, bolts, etc. The new passenger depot, the second finest in the State, is an acquisition to Sacramento.

The city has had a marked growth during the past year, and its importance, as a commercial center, is more thoroughly established than ever; it is the distributing point for supplies for a great portion of the Pacific Coast. The constant employment of so many men by the railroad companies and the work at manufacturing and mills for which Sacramento is so judiciously famous, creates large capital here. The savings and other banks have a surplus capital, which is loaned throughout the State. Here is also one of the finest capital buildings in the United States. From its elevated place may be had one of the best views of this, one of the most fertile valleys in the world. The snow-capped Sierras, in the east; the dark outline of the Coast Range, with Mount Diablo standing out boldly, in the center, to the west; the numerous railroad lines running out in every direction; the white sails of commerce going up and down the river, whose banks are dotted with numerous towns and villages, make this one of the grandest sights to behold. Sacramento is one of the healthiest cities in the State. The lowest temperature reached, is 19 degrees, and the highest, for a few hours in the day only, is 101. The nights are always cool. All the fruits of the temperate and subtropical zones flourish, while the gardens are in a perpetual bloom. The second largest town in the county is

**Folsom.** Directly east on the S. V. & P. C. R. R., a distance of eighteen miles, and lies on the banks of the American river, which affords one of the finest water powers in the country, if improved. The granite quarries near Folsom possess an unlimited supply of the finest building stone in the world. This is in the edge of the gold mining district. Some of the mines in the vicinity are still being worked. The town has a population of 1,500, and the chief support of the town is agriculture and stock raising. The branch State prison is located here.

**Galt.** The third town, is situated in the southern part of the county, on the C. P. R. R., at the junction of Jackson and Anaconda railroads, 32 miles south of Sacramento, in a fine level agricultural country. The present population is 500. Seven miles north, on the same railroad, is

**Elk Grove.** A town of about 350 people, located in as fine an agricultural and fruit section as there is in the State. There are also extensive vineyards of raisin and wine grapes. Between the town and Sacramento City, on the railroad, are Florin and Brighton, surrounded by an excellent agricultural country.

**Middletown.** An old mining town, southeast of Sacramento, and about 30 miles distant. The hills around the place bear evidence that an enormous amount of gold has been taken from their gravelly beds. An excellent quality of potter's clay is found here. Dairying and farming are its main supports.

**Wattsville.** Is situated on the west bank of the Sacramento, some fifteen miles south of the city in the midst of a fine fruit growing section. Passing on south to the southern end of the Andrus Island is the village of Isleton. No richer soil can be found than this island possesses. The other towns in the county are Cosumnes, situated on the river of the same name, eighteen miles from the city; Franklin, located on the Stockton road; Hixville, Indian L. Bonter and Walsh.

The population of Sacramento county, in 1880, was 31,311, which has largely increased within the last two and a half years, it now amounts to in excess of 36,000. At the delta of the Sacramento river, in this county, are Sutter, Grand, Tyler, Andrus, Brannon, Shasta, Colwell and Randall islands all of broad area, which are being reclaimed as fast as possible.

**SAN BENITO COUNTY.** By an act of legislation, in 1874 this county was organized, it formerly belonged to the northeastern portion of Monterey county, the western and southern boundary line running along the summit of the Sierras range of mountains between this and Monterey, running parallel with the coast on the east it is bounded by Fresno and Merced counties, the line running along the summit of the Mt. Diablo range. Between these two ranges of mountains is the valley portion or arable part of the county, called the Delta and San Joaquin



ASTORIA OREGON ENTRANCE TO COLUMBIA RIVER

about 300,000 acres of fruit and grain land, susceptible of cultivation, a great portion of which is yet in a natural state.

#### PLUMAS COUNTY

Lies up among the mountains, in the north-eastern part of the State. Mountain chains define its limits on several sides. Its bounding counties are, on the north, Shasta and Lassen; east, Lassen; south, Sierra and Butte; west, Butte and Tehama. Plumas has an area of 1,700,500 acres, and its general characteristics are similar to those of the adjoining counties. The scenery is wild and picturesque; snow covers the summits of the mountains, and their slopes are clothed in magnificent forests of pine, fir, and oak timber. The county has many beautiful valleys; among the principal ones are Big Meadows, Mountain Meadows, Indian, Geneva, American, Beckworth, and Meadow valleys. The first named is some fifteen miles long by four wide, and is the largest. It lies adjacent to Mountain Meadows, another of nearly the same size, and several other valleys, the whole constituting quite an elevated plateau, 4,500 feet above sea-level. Indian valley, an important and prosperous district, is eleven miles in length, and two miles wide. American valley is nearly the same size, and both connect with smaller valleys. In the mountainous portion of the county are high ridges, abrupt chasms, and deep canyons, through which tumble beautiful streams. Plumas is one of the best watered counties of the State, with living streams running through all of the valleys. Several branches of the Feather river rise in this county. Rush, Indian, Spanish, and Cherry creeks are all tributaries of the north fork of this river, flowing through fine cultivated valleys and important mining districts in their course.

The north-western portion of California has the finest mountain climate in the world, invigorating, healthful, and perfectly delightful; in winter, moderately cold, though there is an abundance of snow in the mountains, and plenty of rain in the valleys. A good share of the wealth of this county is claimed to be in its culture, a great many gold claims having been taken up

in the county; it has 830 inhabitants. There are a number of smaller towns, or mining camps, such as Copperopolis, Carols Mills, Hot Springs, Indian Bar, Longville, Mohawk, Prallville, Spanish Ranch, Soda Bay, Seneca, Union, and Wash. Plumas county, in 1880, had a white population of 8,180. It has large amounts of the Government agricultural and timber land, susceptible of settlement, with the capability of tripling its present population.

#### SACRAMENTO COUNTY

Is situated in the geographical center of the State; on the north it is bounded by Sutter and Placer; east by El Dorado and Amador; south by San Joaquin; west by Solano and Yolo; the great Sacramento river forming the line. The county is nearly quadrangular in shape, with an area of 129,000 acres, besides being watered on its entire western side by the largest river in the State. Several of its principal tributaries flow from the Sierras to the west, through its territory, such as the American, and Cosumnes. Its extreme southern end is watered by the San Joaquin river. Several creeks, among which are Antelope, Willows, Geoglossa, and Dry, also run in the county. Near the junction of the Sacramento and San Joaquin rivers there are several large and fertile islands; Sherman, Grand, Staten, and Andrus are among the largest. The soil of these islands is a rich vegetable and sedimentary deposit, and they are subject to inundation in times of high water. The greater portion of the county is a rich valley, producing large crops of grain, hay, fruit, vegetables, hops and grapes. The valley portion is under a high state of cultivation. The boundaries of the county on the east extend up into the Sierras, where there is considerable oak and other timber. Along the banks of the streams, there is considerable willow, sycamore, and other timber, valued for fuel only.

**Sacramento City.** The capital of the State, is situated on the east bank of the Sacramento, near the mouth of the American river. This is the third largest city in California, and it has a population of 22,123, immediately across the



valleys which are a continuation of the Santa Clara valley, the northern boundary line running through the valley between this and Santa Clara and the Santa Cruz mountains. Its area is 558,560 acres, and it is about 11 miles long, and from 12 to 54 miles wide, and contains a population of 6,500.

The county is watered by the San Benito and Tule rivers and tributaries. These rivers run in a northwestern direction across the entire county. It is not as well watered as some other counties of the State. The timber is principally live, black and white oak, and some pine, in the mountainous portions, sufficient for fuel, but no saw timber.

There is, first, about 25,000 acres of black adobe and sandy loam in the valley along the streams, which will produce an abundance of vegetation. Second, about 31,000 acres of first-class grain land, that is known as San Benito valley, in reality, the extreme southern portion of Santa Clara valley. The soil is a black adobe and loam, with a blue sandy subsoil, and holds moisture well. It is principally on this land that the large amount of wheat, shipped annually from this county, is raised. Third, about 46,000 acres of what is termed second-class grain land, most of which is situated in the foot-hills, and is composed about equally of adobe and sandy soil; on this land most of the hay crops are raised. There are numerous small valleys running in every direction in the upper foot-hills, capable of producing hay, amounting to about 100,000 acres. There is very little mountain land but what is suitable for grazing.

Quartziferous abundance in the mountains; on the east side of the county there are 10 to 12 locations which have been prospected with good indications. Chrome ore is also abundant in the vicinity.

Artesian well water is obtained through the valleys

forming the line; on the south by San Diego, and on the west by Los Angeles and Kern. It contains an area of 15,021,000 acres of surface, larger in extent than several of the New England States, together. Fully 13,720,000 acres of this vast country is a barren desert and mountain waste, or infertile lands. According to the best information we could get, there are about 200,000 acres fit for agricultural purposes and fruit culture. These lands are nearly all in the southwestern portion of the county, which is called San Bernardino valley. The Southern Pacific Railroad passes through from Los Angeles, southeast to Yuma, which lies on the Colorado river, and is the south-east corner of California. The Colorado is navigable for several hundred miles north from Yuma. The Santa Ana river, in the south-western part of the county, is the next largest stream. The mountains surrounding the valley are filled with magnificent forests of pine, cedar, and other timber. To reconnoitre this county can boast as great variety as it can of climatic and physical features. The numerous and rich mining discoveries which have been made during the past two years, are already attracting considerable attention abroad. No less than eighteen different districts are known, some of which have quartz veins in operation. Numerous placer mines have been worked for many years in different portions of this vast territory, the principal ones of which are known as the Little creek placers, Bear valley mines, Lone valley mines, Black Hawk mines, Dry Lake district, New York, Alford, Ivanpah, Mohave, Oro Grande, Grapevine, Calico mountain, Ori, Bladen, Placerville, San Antonio, Silverado. All of these districts are known to have good paying mines, but they are mostly owned by the discoverers, who are usually poor men, and it is not the pioneer or founder of a business who derives the greatest benefit. These mines offer great inducements to capi-

tales, and north and south, east and west, and intersecting each other in right angles. The blocks, each containing eight acres, are subdivided into lots, of one acre each. It is thickly studded with trees, as is indeed the whole valley, which, with the bright green of the gardens and surrounding fields, give it more the appearance of a New England village than a California town.

One of the great advantages enjoyed by San Bernardino is its abundance of water. Almost surrounded by mountains, numerous streams pour into it from all directions, while artesian water can be obtained almost anywhere in the valley, by sinking from 30 to 300 feet. There are now over 500 flowing wells in the valley, affording pure water for the household, as well as for irrigation. Owing to this abundance of water, the farmers have had dread of a dry season than is experienced in other parts of the south, while a failure of crops is a thing wholly unknown. We now pass on, to

#### Riverside.

A distance of twelve miles from San Bernardino, which, although quite youthful, is a thriving settlement. It is almost entirely settled by Eastern people, mostly of some means, many of whom have located here for their health; some for the pleasure of this mild climate, and some for the purpose of raising semi-tropical fruit, to which the entire section is devoted. The settlement of Riverside is a colony, and is about twelve miles in length, by about four wide. The people depend wholly on irrigation. The colony has the water right of the Santa Ana river, which flows up in the mountains northeast from San Bernardino, and also the water furnished by some 450 artesian wells, from San Bernardino valley is allowed to flow on to Riverside. The river is taken out of its course, and distributed, through hundreds of small canals and ditches, for the purpose of irrigating the immense orange orchards in the place.

hills of the Coast Range. These hills and mountains are covered with considerable timber. The third section lies between these foot hills and the ocean. The surface of this country is known as mesa lands. The most important topographical feature of the county is the bay of San Diego, one of the few in arid harbors of this coast. It is a fine sheet of water, twenty miles long by three wide, is almost land locked, and has a safe entrance and a good anchorage for the largest sea-going vessels. The Southern Pacific Transcontinental Railroad passes through San Diego county, from its northwestern border to the southwest corner, for a distance of 165 miles. The California Southern has recently been built, from Colton, on the S. P., south to San Diego City, a distance of 120 miles. The Pacific Coast steamer makes regular trips between San Francisco and San Diego, every five days. The Colorado river, along the eastern border of the county, is navigable for steamers. These combined give San Diego county the best of shipping facilities, both by rail and water. San Diego is the oldest settled county in the State. The bay was first visited by white men under Cabrillo, in 1542, only 60 years after the discovery of America.

In the fertile portion of the county, or in the two sections west of the desert region, are more than 30 valleys, from two to fifteen miles long, and embracing from a few hundred to 20,000 acres; several of these valleys are very fertile, with a dark alluvial soil, while the rolling lands are of a reddish nature, much with a clay subsoil. These lands, up to a few years ago, were considered valueless, but it has been proved that by proper cultivation they are quite productive. Irrigation is, at present, in advance of railroading or any other business. The great need of San Diego county is water. There is considerable available water by the



SAN DIEGO, CALIFORNIA—Fifth Street, Looking South Towards the Bay.

to the north and eastern part of the county; in the vicinity of San Felipe there are a number of flowing wells, at Hollister it rises nearly to the surface by boring 110 feet.

#### Hollister.

The county seat and principal town, is pleasantly located in the northern part of the county, and is connected with San Francisco by a branch of the Southern Pacific Railroad from Gilroy, on the main line, and is distant 94 miles southeast from San Francisco. It has a population of 1,600, and has a splendid system of water works supplied from three artesian wells.

#### San Juan.

Situated eight miles from Hollister, and 92 miles from San Francisco, is one of the old land marks of California. One of the old missions, 106 years old, is still well preserved and used for Catholic service. The town contains 550 inhabitants, and is the second largest town in the county. Six miles southeast of Hollister, and the terminus of this branch of the S. P. R. R., is the town of

#### Tres Pinos.

Which contains 150 inhabitants, and is the shipping point of a large amount of grain and hay for the southern portion of the county.

#### San Felipe.

Located in the northeastern part of the county near the line between this and Santa Cruz county, is noted for the large amount of tobacco raised.

San Benito is capable of supporting six times the present population. It has a good climate and rich soil.

#### SAN BERNARDINO COUNTY.

The largest in the State, is located in Southern California, 624 miles southwest from San Francisco. It is bounded on the north by Inyo county and the State of Nevada; on the east by Arizona, the Colorado river

tal, which is bound to find its way here, and the returns from the developments will bring in a fine revenue from this part of the State. From the agricultural portion of this county the staple product is barley, a winter crop, and, in ordinary good seasons, it yields heavily. Alfalfa, which is the principal hay crop, is cut from five to seven times annually, yielding, at each cutting, about two tons. Vegetables of all kinds attain an enormous growth, as do all other agricultural products. The cultivation of semi-tropical fruits has, of late years, received a large share of attention, and immense tracts of land have been devoted to their culture. The principal fruit section is in and around Riverside, where there is a stretch of country some twelve miles in length, devoted entirely to semi-tropical fruits, and already the owners are receiving handsome incomes from their orchards. Riverside is now boasting and shipping large quantities of raisins, which are pronounced by judges among the best in California, and unsurpassed in the world. Besides semi-tropical fruits all those of more northern latitudes can be raised, and apples and berries raised in the mountains are unsurpassed for size and flavor. Although these fruits grow in the valley, they do not attain that degree of excellence which those grown in the mountains do. Figs, almonds, and, in short, all kinds of fruits and nuts will here.

Another important industry of the county is apiculture, to which, of late years, a great deal of attention has been devoted. Large quantities of honey have been and are continually being shipped from this county to the East and Europe.

#### San Bernardino.

The county seat, and the principal town, has some 3,500 inhabitants. It was founded and settled by the Moravians, and covers one square mile. Like all their towns, it is regularly laid out, with broad streets

This is certainly one of the handsomest places in California.

#### Lugon.

Is the name applied to that portion of San Bernardino county lying between Old San Bernardino, and Crofton and having the Santa Ana river for its northern boundary, while on the south it is bounded by the foot hills north of San Timoteo canyon. The village is delightfully located. The fruits of the citrus family—the peach, apricot, and grape—are principally grown, and are, with the olive, the most profitable. The famous orange grove of old San Bernardino, adjoining the settlement on the west, and the fruit grown in Lugon, is not excelled anywhere in the State.

The climate of the county is as varied as are its physical features. The valley, owing to its inland position, possesses a climate differing from the seaboard towns, the dryness of its atmosphere constituting a marked difference. The spring and fall months are the most enjoyable.

#### SAN DIEGO COUNTY.

Borders on to the Mexican territory of Lower California on the south, east, and to Arizona, the Colorado river forming the line; west, on the Pacific Ocean; and north on San Bernardino. It is the second largest county in the State, having an area of 9,588,000 acres, which is naturally divided into three sections. The entire western half, lying east of the San Jacinto mountains, embracing more than one-half of its territory, is a part of the great Colorado desert, being a barren waste, and in many places below sea level; it is characterized by granite points, sand hills, dry lakes, and volcanoes, hot springs, a growth of cactus and intolerable heat. The second division lies west of the San Jacinto mountains, and comprises a series of valleys and plains, which rise in the west to the foot

hill, if properly husbanded, that would make thousands of acres, now almost valueless, the most productive land in the world. The farm products are wheat, barley, wool, honey, and semi-tropical fruits. Oranges, lemons, limes, olives, peaches, almonds and English walnuts all do remarkably well. The oranges of San Diego county are considered the among the best flavored of the coast.

#### San Diego City.

There are really two San Diegos, the old adobe town, with its tile covered roofs, being situated four miles inland, and quite distinct from San Diego City, which is beautifully situated on the shore of the bay of the same name, with a population of 3,000. It is the county seat, being the only town of any importance in the county, and is from 42 to 602 miles from San Francisco, according to the route traveled by land or water. Its salubrious climate, which is very mild, and certainly the most equable in the world, has made San Diego a noted sanitarium.

#### Natanael City.

Some four miles south from San Diego, is a place of several hundred inhabitants. The ships of the railroad of which it is the terminus are located here. Banner, a new town, about 60 miles northwest from San Diego, is situated in the San Felipe canyon. Grain, fruits, and vegetables of all kinds grow in the neighborhood. Gold mining has been carried on here in some extent since 1871. Julian, a little mining town, is 45 miles northeast of San Diego, among thickly wooded hills, in a grazing and agricultural country.

#### Paul Yuma.

The extreme town of the State, is 194 miles east of San Diego. The fort was established in 1819, when the territory across the Colorado river belonged to Mexico. The post is on the right bank of the river, 140 miles (CONTINUED ON TWENTY-SECOND PAGE.)



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 320 Sansome St., Hallack Building.

ISSUED MONTHLY

Terms.....\$2 per Annum.

SAN FRANCISCO.....JANUARY, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western, Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious settlers to settle in California.

This number, by the hundred, will be 25 cents per copy.

## PRESSWORK.

The presswork of this paper is done by the Pacific Press, Oakland.

## OUR ANNUAL.

We present to our readers an illustrated double edition, containing 36 pages of valuable reading matter. In order to supply the great demand for reliable information, regarding our State, we publish, in this year's annual, a general article on California, giving its geographical location and physical features; its climate, soil, and productions; its manufacturing and commercial interests. The article also contains a vast amount of other valuable information, regarding our young State's progress and advance, from infancy to manhood. The annual also contains fifty-two articles descriptive of the counties of the State. They will be found interesting and full of valuable information. They will contribute largely in making known the advantages which the Golden State can offer for settlement. We take this opportunity, as we shall have an unusually large audience, to say something concerning this journal. The purpose for which THE RESOURCES first presented itself to the public, was to make it a thoroughly reliable medium, through which the people of the United States and other countries, could become acquainted with the fact, that California offers a field for immigration, enterprise, capital and labor, such as the world nowhere else affords. We think we have shown clearly, since it started, that she is fully entitled to this high tribute. The information we spread through its columns regarding her soil, climate, productive interests and commercial advantages, both by sea and land, creates a desire to emigrate. The result is that they come here and settle in various sections, where, by industry, they do well at least, and often become wealthy. It justifies our pride to know that, through our exertions, we have been instrumental in doing something by which a desirable class of immigrants have been brought here, who will aid in the growth and development of the State.

Now, we are of the opinion that it is only necessary to show that California deserves immigrants to have them. It strikes us that the best means of accomplishing this most desirable object, is simply to make known abroad, fairly, the advantages the State has to offer industrious immigrants. And we urge upon our California readers, who have inquiring friends, either in this country, or in the Old World, to inform them of these facts, by sending THE RESOURCES OF CALIFORNIA to them. Convince them also, that there are within the broad limits of the State, several counties, each of which contains land enough yet untouched by the plow, to form a principality. The information that each number of this journal contains will appeal more forcibly to their judgment and convictions than hundreds of private letters.

It is to be hoped that for the benefit of the State, as well as our own, in the future, our sphere of usefulness will be considerably enlarged by more liberal support from our own citizens.

Californians should feel a pride in a publication which is doing so much for the State as this journal is, and send it to their friends.

## SOME OF THE ADVANTAGES OF CALIFORNIA OFFERS TO SETTLERS.

The peculiar and favored conditions of California, render her an attractive field, not only to emigrants from foreign countries, but to those from the more densely populated of the Atlantic States. The comparative remoteness of her situation, and the absence of any thoroughly organized scheme to advance her resources in the quarters where the newly-arrived immigrants from the old world necessarily concentrate, have operated to her disadvantage in the acquisition of settlers.

But these drawbacks are being rapidly removed. Information regarding our condition and resources, is daily becoming more widely diffused, and the question of distance is no obstacle now that the Southern Pacific Railroad is completed through to New Orleans. It is believed that a line of steamers will soon connect with it, for the purpose of bringing passengers and immigrants from Europe to California at much cheaper rates than formerly prevailed by the old routes.

California, as a field for immigration has no advocates in the Eastern press; therefore, correct information in regard to all the points bearing on this subject must be circulated and sought for through other channels. Our efforts are constantly directed to the object of supplying this needed intelligence, and furnishing such facts and statistics, as will enable all whom this journal may reach, to draw impartial conclusions. When a more accurate knowledge of the general conditions of our State prevails among the people of the Atlantic States and Europe, there can be but little doubt as to the destination which the great bulk of intending settlers will select. The spread of correct information is the only means that California need employ to attract the immense immigration that she wants. And let us add, that in the effort to make such information more generally accessible, she will confer a great benefit on those in search of new and permanent homes as well as on herself.

A farm of 160 acres, in almost any of the thickly settled portions of the New England States is worth from \$4,000 to \$5,000. The entire products of such a farm, unless within ten miles of Boston or other large city, would not amount to \$500 a year. But ten acres of orchard in this State will produce more than three times \$600 worth of fruit, with scarcely more expense in the way of labor than the New England farm would require. The owner of an Eastern \$5,000 farm is contented to clear \$100 a year one year after another, but the \$5,000 judiciously expended in good vines in this State, could hardly fail, within five years, to net at least \$1,000 a year.

There is no country where, in proportion to the labor expended, such results can be obtained from farming as in California. As a rule very little of the new land requires clearing, and the immigrant has not to devote the labor of years in bringing his farm into a tillable condition. He finds it all prepared and ready to his hands, requiring nothing but his work and industry to reward him with abundant returns. No great provision is required in any portion of the State against long and severe winters. The great majority of those who have come to California with the object of farming have prospered. The discontented element, which is found to prevail here, as in all other countries, consists of those who have relied too much on the natural advantages with which they found themselves surrounded, and expected to secure success without much work. The right class of agricultural laborers seldom fail of success here, and to such no State in the Union offers greater inducements. The bulk of our tillable soil is far from being exhausted, and there are millions of acres of the finest arable land which have not yet been touched by the plow. With fertile lands, an unsurpassed climate and a market at his door, the immigrant cannot, anywhere, find a more favorable place for settlement than California. Throughout a very large section of the country the rainfall is sufficient for all agricultural purposes, even in the driest seasons.

The reclamation of our swamp and overflowed, which is being prosecuted with great energy and vigor, has, already, prepared for settlement a large area of the most productive soil in the world. Irrigation works have made such progress, that in the dry sections, lands are not now offered for sale without the means for all the necessary moisture being first provided.

An immense field is thus open to farmers, to better their condition, by coming to California.

## A FEW FACTS RELATIVE TO OUR MATERIAL PROGRESS.

In the course of a lecture, recently delivered in New York City, by a Returned Californian, he stated, among other things, "That in the 30 years since the American people got fairly started in their Californian career, they have performed an amount of labor, and created an amount of wealth that is absolutely marvelous to contemplate." And yet there are some who say that the State has not made much progress. Since gold was discovered we have produced and sent into the channels of the world's commerce, more than a billion dollars worth of the precious metals. Industry in all parts of the world has felt the benefit of the stimulus thus given to universal trade; the demand for labor has been everywhere increased and its reward enhanced. Our wheat exports, during the last quarter of a century, have not been fewer than 100,000,000 centals.

Apart from the precious metals, our annual export trade has attained a value of nearly \$70,000,000. Our lumber trade has developed into larger dimensions. In agricultural pursuits our chief reliance has been on wheat, and it will, without doubt, continue to be our principal staple product for some years to come, though a more diversified system of farming is beginning to prevail, more and more, to the great advantage, not only of the farmers themselves; but also of the general interest of the State. The acre of land under wheat culture, during the past season, is estimated to have been about 3,000,000 acres; the yield of which we assume to be not less than 40,000,000 bushels. Our natural advantages are such that, notwithstanding our great distance from the principal wheat markets of the world, we can compete successfully with Russia and the Atlantic States. A larger area of land is every year being devoted to this cereal.

Our wool interest has become of great value; the clip of the past year being estimated at nearly 45,000,000 pounds. Judging from present indications, our products in a few years will include cotton and silk, experiments in the cultivation of these staples having thus far been attended with encouraging results. Our wine interest is increasing in growth and value year by year. From this industry California will reap an immense amount of wealth in the near future. Last year's product is estimated at 12,000,000 gallons, while a large amount of brandy was distilled from grapes. For fruit growing no part of the world has such advantages as California, the variety of soil and climate, in the different sections, being suitable for the choice descriptions.

Senator Miller, not long since showed from statistics that notwithstanding the many drawbacks our State has labored under, on account of the Chinese question, its remoteness from the great centers of civilization and other causes, yet nearly one-fourth of the increased commerce of the nation, since 1849, is due to California alone. In general commercial and financial affairs, the position attained by the State, and more particularly San Francisco, during the period of its existence under American rule, exhibits a degree and rapidity of progress altogether without parallel in history. The world is beginning to have a correct appreciation of the natural wealth of California. People, who a few years ago, regarded it merely as a gold and silver producing State are now aware of the fact, that her agricultural and other products are of more value than all the resources of her mines, as vast and valuable as they are.

The banking capital of the State amounts to about \$150,000,000, of which sum \$85,000,000 are represented in our various savings institutions. The value of our exports by sea, during the past year is put down as over \$55,218,674. The value of our manufactures, yearly, is something over \$90,000,000. The assessed value of the taxable property of the State is, according to the authentic returns, more than \$650,000,000. These figures, as representing the more salient features of our Young State's condition speak for themselves.

The foregoing facts and figures, we trust, will prove incentives to our citizens to continued enterprise and activity.

THE RESOURCES OF CALIFORNIA is the best paper on the Coast for farmers.

## E. J. BALDWIN'S

Pure Grape

## BRANDIES AND WINES.

ATTENTION IS CALLED TO THE JUSTLY CELEBRATED PRODUCTS OF THE FAMOUS

Santa Anita Vineyard,  
San Gabriel Valley, California.

## PURE OLD PORT WINE,

Vintages of 1875, 1876, and 1877,  
Will be found very rich and choice,  
Warranted pure and of full body.

## PURE OLD ANGELICA,

Vintages of 1875 and 1876.  
This is a Wine of Superior Quality, and such as has never been on the market in any country. This article SHOULD NOT be classed with the so-called Angelica Wines of this Coast, but is of a rich, rare flavor and full bodied, and NO CORDIAL can compare with it.

## PURE GRAPE BRANDY,

Manufacture of 1875 and 1876.  
Cannot be excelled, having been but a few months before the Public, it is meeting with unparalleled favor, to the exclusion of all other brands.

## Special Gold Medals

AWARDED AT THE LAST CALIFORNIA STATE FAIR, AND ALSO AT THE SAN MATEO AND SANTA CLARA DISTRICT FAIR.

## ALL OF THE

## "BALDWIN" BRANDIES

Are Manufactured from the best selected grapes, grown upon soil peculiarly adapted to fine brandies, and is always retained in private stock until over five years of age, and none offered for sale at a less age. Guaranteed free from foreign spirits or adulterations of any kind, and the identity of the brand always preserved, which is a guarantee for fine quality, flavor, and purity.

Skilled Experts, Judges of brands, of all nations, Doctors and Scientists, at once pronounce E. J. BALDWIN'S

PURE GRAPE BRANDY  
THE PUREST AND BEST IN THE WORLD.

## One of Many Testimonials:

SAN FRANCISCO, May 23, 1881.

E. J. BALDWIN, Esq.—Dear Sir: I have great pleasure in assuring you that your Santa Anita Pure Grape Brandy, in my opinion, as in that of many of my friends is not excelled in Biquet, flavor and purity, by any brandy produced in France or Italy. I should have the careful attention paid to the selection of the grapes, and the method employed in removing the fruit off, if its equal, of the same vintage, can be found anywhere. I took great pleasure in distributing the package you sent me to my friends, and all so and as delighted as surprised that our State could boast of such a fine production.

I am, very truly, yours,  
(Signed) A. J. ROWIE, M. D.

For Hot or Cold Punches the "BALDWIN" BRANDY cannot be equaled for medicinal purposes. It is far ahead of any other as a stimulant, it is more agreeable and healthful, and no headaches or bad effects whatever are caused by its use. This celebrated brandy is made in a new patent still, manufactured especially for Mr. Baldwin by a distiller's friend, which removes all impurities, and ages and mellow the brandy wonderfully, in a short time.

For sale by all leading Druggists, Liquor Merchants and first-class grocers.

For Eastern and Foreign Markets, by directing letters to

E. J. BALDWIN, 37 Eddy Street,

The Hubway Hotel  
SAN FRANCISCO.



# LINFORTH, RICE & CO.,

—IMPORTERS OF—

## HARDWARE, AGRICULTURAL AND MINING TOOLS,

### STEAM ENGINES, SUGAR MACHINERY, BELLS,

### IRON BEAMS, PLATE IRON, SHEET IRON, ETC.

## STEAM ENGINES.



**Standard Stationary Engines.**

The cut represents our Improved Slide Valve Stationary Engines, except where the variable cut off is used. They are simple in construction, with the fewest possible parts; some being dispensed with that are in use in the ordinary engines of this class. They are solid, strong, symmetrical, of the best material and workmanship, and of handsome finish.

The Steam Chest is cast on the cylinder, dispensing with a troublesome joint.

The Valve is a Slide Valve, working on the side, thus doing away with the wear and tear of the rock shafts. They are made to open full port and to cut off the steam from one-half to five-eighths of the stroke, thus securing full pressure when most needed, and as early a cut off as possible with the single valve.

The Guides are bored and in a line with the cylinder, and so arranged that they may be removed and replaced again with no chance of getting out of line.

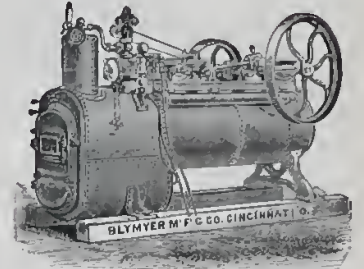
The Main Shaft and Connecting Rod are of hammered iron; and the Piston Rod, Valve Rod, and Crank Pin are of steel. All the bearings are broad and long, with gun-metal boxes, securing the least possible friction.



**Queen City Portable.**

Size of Fire Box.	Size of Boiler.	Revolutions Per Minute.	Size of Pulley.	Size of Cylinder.	Horse Power.
26 x 36	32 x 60	250	6 1/2 x 26	4 x 8	4
28 x 39	35 x 66	230	6 1/2 x 28	5 x 9	6
28 x 30	35 x 72	200	8 1/2 x 30	6 x 10	8

The 6 x 10 is a tubular boiler—55 tubes, 2 1/2 x 40 inches. The Trucks are furnished with coupling pole or shafts, as may be desired. Orders should specify size of Pulley wanted or give the size and speed of pulley on machine to be driven. If not specified, the size of pulley given above will be sent. With Mounted Engines. Coupling Poles will be sent instead of Shafts, unless the order specifies to the contrary.



**Portable Engine on Skids.**

The Engine may be detached from the boiler if desired, and set up as a Stationary Engine. All that is required in addition to the Portable Engine on Skids, as shown in engraving above, is connecting pipes.

Pipes furnished on application.

## ZIMMERMAN

Improved Galvanized Iron, Portable Combined

FRUIT AND VEGETABLE

**Dryer and Baker.**

## Blymyer Mannf'g Co. Bells.



**Church, School and Fire Alarm.**

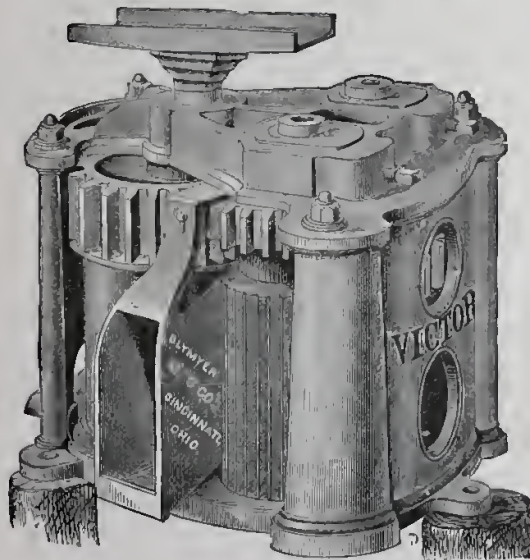
The Blymyer Manufacturing Co.'s Bells average in price less than one half as much as the copper and tin composition bells and mountings, and are warranted against breakage twice as long—two years.

As to the quality, they are fine-toned, can be heard as far as copper and tin bells of same size, and they are more durable.

### PRICES.

Size.	School.	Fire.	Church.
19-inch	\$18.00		
20 "	24.00		
24 "	32.00		
26 "		\$50.00	\$65.00
28 "		65.00	85.00
32 "		90.00	115.00
36 "		130.00	165.00
40 "		175.00	210.00
44 "		215.00	260.00
48 "		240.00	330.00
51 "		420.00	520.00

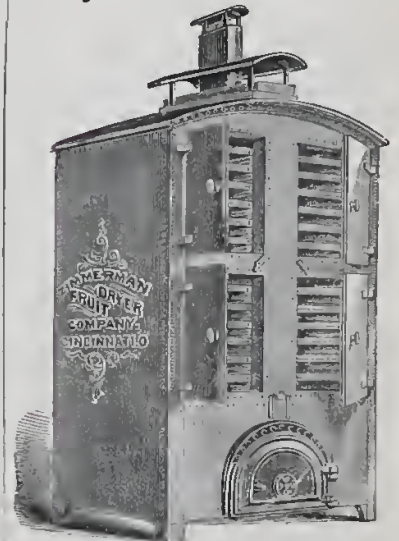
## SUGAR MACHINERY.



**THE VICTOR.**

The above engraving illustrates the **Victor Cane Mill**, the leading Mill for Animal Power in all States where either the Sorgho or Sugar Cane are grown. It has been awarded the **First Premium** over all competitors at **Fifty-one State Fairs**, and was awarded the **Grand Medal at the Centennial Exhibition**. It has met every mill of any character in all the country at every Working Trial, and has taken the Premium over all. **The number sold since 1863 exceeds Twenty-two Thousand.**

Send for our Illustrated Circular for Horizontal Mills, also for the Celebrated Niles' Mills, for Steam Power, and Cook Evaporator.



**No. 3, Large---Dryer only.**

THE BEST MACHINE.

We offer our Dryer and Baker to the public, with the assurance that we have the best combined and only Galvanized Iron Machine in the market, combining, as it does, the following important and essential features, viz:

It is portable, fire-proof, economical, labor-saving, convenient. It will not rust, requires no painting, is cheap, and cures fruit and vegetables equal, if not superior, to any Dryer in the market.

Furthermore, we have the approval and hearty endorsement of nearly all the leading fruit and agricultural journals of the country, and the God-send of all who have used it or seen it operate.

No. 1, \$50. No. 2, \$75. No. 3, \$150. No. 4, \$250

We are Sole Agents on this Coast for the following Lines of Goods:

**MINING & HAMMER STEEL**, from **CANNON STEEL WORKS**, Sheffield, England, in Bond or Duty Paid.

Gem Farming Tools; Diamond Axes; Pacific Sledges and Wedges; Black Diamond Files and Rasps; Chester & Harris Axe, Pick and Sledge Handles; The Giant Riding Saw Machine; Zimmerman Power Meat Cutter; Enterprise Windmills; Gerrish Submerged Pumps; King Lawn Mowers; Queen Lawn Mowers.

Please send for our General Catalogue, or Special Descriptive Circulars. Correspondence respectfully solicited. Solicitamos Correspondencia en Español.

**LINFORTH, RICE & CO.,**

San Francisco, Cal.

323 and 325 MARKET STREET,



## COMMERCIAL, NATIONAL, SAVINGS AND PRIVATE BANKING HOUSES OF CALIFORNIA.

## COMMERCIAL BANKS.

NAME OF BANK.	Place.	County.	President.	Cashier.	Corresponding Bank, East.	Corresponding Bank, California.	Capital.	Surplus.
Anaheim Bank of	Anaheim	Los Angeles	S. H. Smith	Neo B. Smith	First National Bank, New York	Pacific Bank, San Francisco	\$ 100,000	\$ 7,000
Baneta Bank of	Baneta	San Diego	N. P. Jenkins	C. M. Jenkins	First National Bank, New York	Bank of California, San Francisco	200,000	32,500
Butte County Bank	Butte	San Francisco	N. P. Jenkins	C. M. Jenkins	American Exchange, New York	London and San Francisco Bank, S. F.	250,000	32,500
California Bank	San Francisco	San Francisco	W. A. Wood	Thomas Brown	Laidlaw & Co., New York	First National Gold Bk, San Francisco	1,000,000	1,400,000
California State Bank of	Sacramento	Sacramento	N. D. Hittell	A. Abbott	American Exchange, New York	First National Gold Bk, San Francisco	500,000	1,200
California State Deposit and Trust Co.	San Francisco	San Francisco	J. D. Fry	C. R. Thompson	First National Bank, New York	First National Bank, San Francisco	2,000,000	30,000
Chico Bank of	Chico	Butte	J. D. Fry	C. R. Thompson	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Citizens' Bank of Nevada City	Nevada City	Calaveras	J. D. Fry	C. R. Thompson	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Colma County Bank	Colma	San Mateo	George H. H. H.	W. S. Harrison	American Exchange, New York	Bank of California, San Francisco	500,000	1,000,000
Commercial Bank of Santa Ana	Santa Ana	Los Angeles	D. H. Murphy	H. Hoffman	First National Bank, New York	Bank of California, San Francisco	1,000,000	1,200,000
Commercial & Savings Bank of San Jose	San Jose	San Jose	O. S. Withyby	Bryan Howard	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Consolidated Bank of San Diego	San Diego	San Diego	S. G. Ellis	W. M. Hale	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Dixon Bank of	Dixon	Yuba	S. G. Ellis	W. M. Hale	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Farmers' Bank of Wheatland	Wheatland	San Bernardino	L. J. Jacobs, Mgr.	R. H. Warfield	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Farmers' Exchange Bank	Healdsburg	Sonoma	E. H. Barnes	R. H. Warfield	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Farmers' and Merchants' Bank	Los Angeles	Los Angeles	I. W. Hoffman	John Miller, Sec'y	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Farmers' Savings Bank	Lakeport	Lake	I. W. Hoffman	John Miller, Sec'y	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Farmers' Bank of Fresno	Fresno	Fresno	I. W. Hoffman	John Miller, Sec'y	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Fresno County Bank	Fresno	Fresno	I. W. Hoffman	John Miller, Sec'y	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Grangers' Bank of California	San Francisco	San Francisco	John Lewisling	A. Montpelier	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Gilroy Bank of	Gilroy	San Clara	L. A. Whitehurst	G. E. Hersey	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Headlands Bank of	Headlands	Sonoma	H. W. Wilson	John Miller, Sec'y	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Hollister Bank of	Hollister	Humboldt	J. W. Henderson	W. M. Hunt	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Humboldt County Bank	Humboldt	Humboldt	J. W. Henderson	W. M. Hunt	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Kona Valley Bank	Kona	Kauai	Solomon Jewett	C. W. Ford	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Lake Bank of	Lakeport	Lake	Frank D. Tines	C. P. Hastings	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
La Porte Bank of	La Porte	Plumas	E. Brandon	D. W. Harrison	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Los Angeles County Bank	Los Angeles	Los Angeles	J. S. Saulson	H. L. Mendenhall	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Martinez Bank of	Martinez	Contra Costa	E. L. Fish	W. H. Heest	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Mendocino Discount Bank	Mendocino City	Mendocino	Samuel C. Bates	Mark Howell	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Merced Bank	Merced	Merced	A. L. Crosby	Robert M. Henry	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Modesto Bank	Modesto	Stanislaus	Robert M. Henry	H. F. Hastings	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Mono County Bank	Mono	Mono	Robert M. Henry	H. F. Hastings	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Napa Bank of	Napa	Napa	L. A. Whitehurst	G. E. Hersey	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Nevada Bank of	Nevada	Nevada	L. A. Whitehurst	G. E. Hersey	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Pacific Bank	San Francisco	San Francisco	H. H. McDonald	L. V. Varia	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Petaluma Savings Bank	Petaluma	Sonoma	H. T. Fairbanks	D. B. Fairbanks	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Sacramento Bank	Sacramento	Sacramento	O. H. Swift	Ed. H. Hamilton	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Salinas City Bank	Salinas City	Monterey	Joseph D. Carr	W. S. Johnson	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Santa Clara County Bank	Santa Clara	Santa Clara	P. P. Hedges	C. W. Hayward	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Santa Cruz County Bank	Santa Cruz	Santa Cruz	Elbert Austin	E. J. Cox	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
San Joaquin Valley Bank	Stockton	San Joaquin	C. J. Leach	F. J. Higgins	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
San Jose Bank of	San Jose	San Jose	T. E. Beams	C. T. Park	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
San Luis Obispo Bank of	San Luis Obispo	San Luis Obispo	J. P. Andrews	W. E. Stewart	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Santa Rosa Bank	Santa Rosa	Sonoma	E. T. Ransom	H. H. Auer	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Savings Bank of Santa Rosa	Santa Rosa	Sonoma	A. P. Overton	F. E. Newman	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Siskiyou County Bank	Yreka	Siskiyou	Jerome Churchill	Ed. E. Wadsworth	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
St. Helena Bank	St. Helena	Napa	Seneca Ewer	C. P. Hastings	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Stockton Savings Bank	Stockton	San Joaquin	H. S. Sargeant	Sidney Nowell	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Sonoma County Bank	Sonoma	Sonoma	Wm. Hill	I. S. Van Duren	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Sonoma Valley Bank	Petaluma	Sonoma	D. M. Dutton	Wm. Hill	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Suisun Bank of	Suisun	Solano	D. M. Dutton	Wm. Hill	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Tehama County Bank	Red Bluff	Tehama	C. Caldwell	W. B. Cahoon	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Tonoloway Bank of	Tonoloway	Tulare	W. Dutton	Thos. J. Ables	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Ukiah Bank of	Ukiah	Mendocino	R. McGarvey	Henry J. Giddings	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Umpqua Bank of	Umpqua	Umpqua	R. McGarvey	Henry J. Giddings	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Visalia Bank of	Visalia	Tulare	R. McGarvey	Henry J. Giddings	First National Bank, New York	First National Bank, San Francisco	200,000	30,000
Wells, Fargo & Co.'s Bank	San Francisco	San Francisco	Lloyd Tevis	H. Wadsworth, Treas.	Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco	6,250,000	2,288,500
Wasonville Bank of	Wasonville	Santa Cruz	Charles Ford	J. N. Besse	Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco	100,000	16,000
Willows Bank of	Willows	Colusa	N. D. Ridenour	W. C. Murdoch	American Exchange, New York	London and San Francisco Bank, S. F.	200,000	13,200
Woodland Bank of	Woodland	Yolo	N. D. Ridenour	W. C. Murdoch	American Exchange, New York	London and San Francisco Bank, S. F.	200,000	13,200
FOREIGN BANKS (San Francisco Branches).								
Anglo-Californian Bank, Limited	San Francisco	San Francisco	F. F. Low, Mgr.	P. N. Lillenthal	Anglo-Californian Bank, New York	Anglo-Californian Bank, San Francisco	3,000,000	Head Office
British Columbia Bank, Limited	San Francisco	San Francisco	W. Powell, Mgr.	W. Powell	British Columbia Bank, New York	British Columbia Bank, San Francisco	1,000,000	Head Office
British North America Bank, Limited	San Francisco	San Francisco	C. E. Wood	J. S. Angus, Sec'y	British North America Bank, New York	British North America Bank, San Francisco	1,000,000	Head Office
London and San Francisco Bank—Limited	San Francisco	San Francisco	A. Scrivener, Mgr.	A. Scrivener	London and San Francisco Bank, New York	London and San Francisco Bank, San Francisco	1,000,000	Head Office

## NATIONAL BANKS.

NAME OF BANK.	Place.	County.	President.	Cashier.	Corresponding Bank, East.	Corresponding Bank, California.	Capital.	Surplus.
First National Bank	Alameda	Alameda	Levi Jenks	James E. Baker	First National Bank, New York	First National Bank, San Francisco	100,000	1,500
First National Bank	Los Angeles	Los Angeles	E. F. Spicer	William Lacy	First National Bank, New York	Pac. Bk. of Cal., & First Nat. G. Bk.	100,000	70,000
First National Bank	Oakland	Alameda	V. D. Moody	Charles H. Twombly	Nat. Park Bk. N. Y. & Maverick, Bond	First Nat. G. Bk. & Lazard Freres, S. F.	100,000	70,000
First National Gold Bank	Petaluma	Alameda	H. A. Palmer	Charles E. Palmer	Chemical Bank, New York	First National Gold Bk, San Francisco	100,000	20,000
National Gold Bank of D. O. Mills & Co.	Sacramento	Sacramento	Edgar Mills	Frank Miller	Chemical Bank, New York	First National Gold Bk, San Francisco	100,000	20,000
First National Bank	San Francisco	San Francisco	R. C. Woodworth	E. D. Morgan	American Exchange Nat. Bank, N. Y.	Bank of California, San Francisco	400,000	57,000
First National Bank	San Jose	San Jose	William D. Tiedale	L. G. Nisulth	Nat. Park and First Nat. Bank, N. Y.	Anglo-Cal. and First Nat. Bank, S. F.	500,000	83,500
First National Bank	Santa Barbara	Santa Barbara	W. W. Hollister	A. M. Knutson	Chemical National Bank, New York	Bank of California, San Francisco	50,000	13,000
First National Bank	Stockton	San Joaquin	H. H. Fowler	H. H. Fowler, Mgr. & Cl.	First National Bank, New York	First National Gold Bk, San Francisco	300,000	60,000
Stockton National Bank	Stockton	San Joaquin	H. W. Tully	H. W. Tully	Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco	100,000	

## SAVINGS BANKS.

NAME OF BANK.	Place.	County.	President.	Cashier.	Corresponding Bank, East.	Corresponding Bank, California.	Capital.	Surplus.
California Savings and Loan Society	San Francisco	San Francisco	D. Farguharson	V. Campbell, Sec'y	First National Bank, New York	First National Bank, San Francisco	\$ 100,000	\$ 2,500
French Savings and Loan Society	San Francisco	San Francisco	A. Well	A. Brand, Sec'y	First National Bank, New York	First National Bank, San Francisco	300,000	12,251
German Savings and Loan Society	San Francisco	San Francisco	L. Gotting	George Lott, Sec'y	First National Bank, New York	First National Bank, San Francisco	400,000	100,000
Humboldt Savings and Loan Society	San Francisco	San Francisco	Adolph J. Hartung	R. J. Tobin, Treas.	First National Bank, New York	First National Bank, San Francisco	1,250,000	1,250,000
Mendocino Bank of	Mendocino City	Mendocino	Engle Brown	William Heest	First National Bank, New York	First National Bank, San Francisco	100,000	6,000
Merced Security Savings Bank	Merced	Merced	Elas Perkins	W. W. Westby	First National Bank, New York	First National Bank, San Francisco	300,000	11,719
Oakland Bank of Savings	Oakland	Alameda	E. C. Sessions	W. W. Garthwaite	First National Bank, New York	First National Bank, San Francisco	1,000,000	28,500
People's Savings Bank	Sacramento	Sacramento	J. Beckman	W. F. Hamilton	First National Bank, New York	First National Bank, San Francisco	500,000	9,700
San Francisco Savings Union	San Francisco	San Francisco	James J. Fenerty	James J. Fenerty	First National Bank, New York	First National Bank, San Francisco	200,000	21,000
Santa Cruz Bank of Savings and Loan	Santa Cruz	Santa Cruz	E. Austin	E. J. Cox	First National Bank, New York	First National Bank, San Francisco	500,000	21,000
Savings and Loan Society	San Francisco	San Francisco	John Brickell	Cyrus W. Crumney	First National Bank, New York	First National Bank, San Francisco	500,000	24,000
Security Savings Bank	San Francisco	San Francisco	J. Lincoln	W. S. Jones, Sec'y	First National Bank, New York	First National Bank, San Francisco	500,000	24,000
Stockton Savings and Loan Society	Stockton	San Joaquin	L. Shippee	F. M. West	First National Bank, New York	First National Bank, San Francisco	500,000	24,000
Union Savings Bank	San Francisco	San Francisco	W. H. Allen	A. Palmer, Treas.	First National Bank, New York	First National Bank, San Francisco	500,000	24,000
Vallejo Savings and Commercial Bank	Vallejo	Solano	E. J. Wilson	Joseph H. English	First National Bank, New York	First National Bank, San Francisco	300,000	100,000

## PRIVATE BANKERS.

NAME OF BANK.	Place.	County.	President.	Cashier.	Corresponding Bank, East.	Corresponding Bank, California.	Capital.	Surplus.
Crafts & Son	Alhambra	Sierra			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco	\$	\$
P. Davis & Bro	Anaheim	Los Angeles			Wells, Fargo & Co., New York	First National Bank, San Francisco		
Andrews & Hollenbeck	Auburn	Placer			Chatham Nat. Bank, New York	Wells, Fargo & Co., San Francisco		
J. P. Brown & Co.	Campsville	Yuba			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
Cressler & Boucher	Colfax	Colfax			London and San Francisco Bank, S. F.	First National Gold Bk, San Francisco		
Hayford & Perkins	Colfax	Placer			Central National Bank, New York	First National Bank, San Francisco		
E. Weller	Colonia	El Dorado				Wells, Fargo & Co., San Francisco		
Wells, Fargo & Co.	Columbia	Tuolumne			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
H. Scammon	Downsville	Sierra				London and San Francisco Bank, S. F.		
E. L. McLean	Dutch Flat	Placer				Anglo-Californian Bank, San Francisco		
W. & P. Nichols	Dutch Flat	Placer			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
J. H. Burnham	Folsom	Sacramento				Wells, Fargo & Co., San Francisco		
Charles Holzman	Forest City	Sierra			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
A. B. Carlock	Fort Jones	Shasta			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
Wellsbank Bros. & Co.	Grass Valley	Nevada			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
Harris & Rhine	Independence	Inyo			C. B. Richards & Co., New York	Anglo-Californian Bank, San Francisco		
Wells, Fargo & Co.	Iowa City	Placer			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
Ducker & Jewett	Marysville	Yuba			Wells, Fargo & Co., New York	Anglo-Californian Bank, San Francisco		
Walter Willey	Marysville	Yuba			Wells, Fargo & Co., New York	Wells, Fargo & Co., San Francisco		
C. Schindler	Michigan Bluff	Placer			American Exchange Nat. Bank, N. Y.	Anglo-Californian Bank, San Francisco		
J. H. Goodman & Co.	Napa City	Calaveras			American Exchange Nat. Bank, N. Y.	London and San Francisco Bank, S. F.		
Seely & Hickford	Napa City	Napa				Bank of California, San Francisco		
Phillips, Richards & Co.	Napa City	Napa				Bank of California, San Francisco		
Ridout, Smith & Co.	Napa City	Napa				Bank of California, San Francisco		
Morgan, Jewell & Co.'s Bank	Napa City	Napa				Wells, Fargo & Co., San Francisco		
W. A. Alderson	Placerville	Nevada				F. Berlon & Co., San Francisco		
Herbert Kraft	Placerville	El Dorado				London and San Francisco Bank, S. F.		
Riverside Bank	Red Bluff	Tehama				Bank of California, San Francisco		
James Lawrence English	Sacramento	Sacramento	Dyer Bros., Bankers			Sather & Co., San Francisco		
W. A. C. Smith	St. Helena	Napa			Laidlaw & Co., New York	Anglo-Californian Bank, San Francisco		
D. B. Carver	St. Helena	Napa			Chase National Bank, New York	Bank of California, San Francisco		
M. A. Luce	San Diego	San Diego			National Park Bank, New York	Facile Bank, San Francisco		
Hong Kong and Shanghai Banking Corp.	San Francisco	San Francisco			Leard Freres, New York	Bank of California, San Francisco		
Donahoe, Kelly & Co.	San Francisco	San Francisco	H. W. Harrison, Agt.		New York Agency, 49 William Street		5,000,000	2,500,000
Belloc & Co.	San Francisco	San Francisco			Edward K. Ford & Co., New York			
P. Berlon & Co.	San Francisco	San Francisco			F. von Hollman & Co., New York			
Alfred Ward & Co.	San Francisco	San Francisco			A. Islin & Co., New York			
Lazard Freres	San Francisco	San Francisco			Lazard Freres, New York			
Balbir & Co.	San Francisco	San Francisco			Drexel Morgan & Co., New York			
Bulfin & Co.	San Francisco	San Francisco			A. S. Rosenbuth & Co., New York			
Tallant & Co.	San Francisco	San Francisco			Drexel, Morgan & Co., New York			
E. F. Clearing House	San Francisco	San Francisco	A. McKinlay	Chas. Sleeper, Mgr.				
U. M. Gordon & Co.	San Rafael	Marin						
George Wood	Sierra Valley	Sierra				Bank of California, San Francisco		







J. LEVIN JAMES, President, San Francisco.  
JNO. J. VALENTINE, Vice-President,  
and Gen. Superintendent, San Francisco.  
JAMES HURON, Secretary, San Francisco.  
H. H. PARSONS, Ass't Sec'y, New York.  
H. WADSWORTH, Treasurer, San Francisco.  
WALLACE, GREATHOUSE & BLANDING,  
Attorneys, San Francisco.

OFFICE OF THE  
VICE-PRESIDENT AND GENERAL SUPT.

# Wells, Fargo & Company,

## Express and Banking,

San Francisco, January 1, 1883.

DEAR SIR: The following is a copy of our Annual Statement of Precious Metals produced in the States and Territories west of the Missouri River, including British Columbia (and receipts in San Francisco by express from the west coast of Mexico) during 1882, which shows aggregate products as follows: Gold, \$30,193,355; Silver, \$50,155,288; Copper, \$4,055,037; Lead, \$8,008,155. Total gross result, \$92,411,835.

California shows a decrease in Gold of \$1,696,351. Nevada shows a total falling off of \$1,484,188; the yield from the Comstock being \$1,333,018, as against \$1,726,162 in 1881—a decrease of \$393,144. The product of Eureka District is \$3,176,656, as against \$4,127,265, in 1881—a decrease of \$953,609. Utah, Colorado, New Mexico and Arizona each show a notable increase on the products of last year.

The increase of transportation facilities for carrying bullion, pig metal, ores, etc., has increased the difficulty of verifying the reports of products from several important localities; and the general tendency is to exaggeration when the actual values are not obtainable from authentic sources, but the aggregate result as shown herein, we think may be relied on with reasonable confidence.

STATES AND TERRITORIES.	Gold Dust and Bullion by Express.	Gold Dust and Bullion by other conveyances.	Silver Bullion by Express.	Ores and Base Bullion by Freight.	TOTAL.
California	\$14,733,643	\$736,682	\$509,342	\$352,831	\$16,332,498
Nevada	752,506		6,588,023	3,022,847	10,363,376
Oregon	431,024	215,512			646,536
Washington	93,892	46,946			140,838
Alaska		240,000			240,000
Idaho	1,091,208	191,568	88,280	1,160,072	3,325,738
Montana	2,150,000	215,000	4,065,000	1,574,000	8,004,000
Utah	76,954	6,201	3,139,020	4,921,000	8,143,175
Colorado	2,536,500		4,803,925	18,592,840	25,933,265
New Mexico	43,728	21,864	919,047	2,682,493	3,667,132
Texas			257,597		257,597
Arizona	386,517	100,000	5,631,083	3,180,667	9,298,267
Dakota	2,595,570	259,557			2,855,127
Mexico (West Coast)	510,192		1,719,249	312,000	2,532,441
British Columbia	537,476	134,369			671,845
	\$25,939,210	\$2,167,699	\$28,506,176	\$35,798,750	\$92,411,835

The gross yield for 1882, shown above, segregated, is approximately as follows:

Gold	32.10%	\$30,193,355
Silver	54.10%	50,155,288
Copper	4.10%	4,055,037
Lead	8.62%	8,008,155
		\$92,411,835

ANNUAL PRODUCTS OF LEAD, COPPER, SILVER AND GOLD IN THE STATES AND TERRITORIES WEST OF THE MISSOURI RIVER, 1870-1882.

YEAR.	Products as per W. F. & Co's Statements, including Amounts from British Columbia and West Coast of Mexico.	Product after deducting Amounts from British Columbia and West Coast of Mexico.	The Net Product of the States and Territories west of the Missouri River, exclusive of British Columbia and West Coast of Mexico, divided, is as follows:			
			LEAD.	COPPER.	SILVER.	GOLD.
1870	\$54,000,000	\$52,150,000	\$1,080,000		\$17,320,000	\$33,750,000
1871	58,284,000	55,784,000	2,100,000		19,286,000	34,398,000
1872	62,336,959	60,351,824	2,250,000		19,924,429	34,177,395
1873	72,258,693	70,139,860	3,450,000		27,483,302	39,206,558
1874	74,401,045	71,965,610	3,800,000		29,699,122	38,466,488
1875	80,889,057	76,703,433	5,100,000		31,635,239	39,968,194
1876	90,875,173	87,219,859	5,040,000		39,292,924	42,886,935
1877	98,421,754	95,811,582	5,085,250		45,846,109	44,880,223
1878	81,154,622	78,276,167	3,452,000		37,248,137	37,576,030
1879	75,349,501	72,688,888	4,185,769		37,032,857	31,470,262
1880	80,167,936	77,232,512	5,742,390	\$ 898,000	38,033,055	32,559,067
1881	84,504,417	81,198,474	6,361,902	1,195,000	42,987,613	30,653,959
1882	92,411,835	89,207,549	8,008,155	4,055,037	48,133,039	29,011,318

The exports of silver during the present year to Japan, China, India, the Straits, etc., have been as follows: From Southampton, \$27,390,000. From Venice, \$9,695,000. From Marseilles, \$806,000. From San Francisco, \$5,375,000. Total, \$43,266,000, as against \$27,000,000 from the same places in 1881.

JNO. J. VALENTINE,  
Vice-President & Gen'l Superintendent

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the

## STANDARD SYRUP,

A SUPERIOR ARTICLE,

Put up in Barrels Expressly for Home Consumption.

## EXTRA HEAVY SYRUP,

In Barrels for Export.

## REFINED SUGARS,

At Lowest Market Rates.

Office 325 Market Street, Up Stairs.

## J. D. SPRECKELS & BROS.,

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS.

325 Market Street,

SAN FRANCISCO.

## PRESCOTT & ZIMMERMANN,

PROPRIETORS OF

## Queen City Market,

DEALERS IN ALL KINDS OF  
AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED  
MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF  
Choicest Eastern Hams, Bacon, Lard and  
Foreign Supplies of all kinds.

CORNED BEEF AND PORK FOR SALE BY  
THE BARREL.

1164-1178 Market St., and 6-8 Taylor St.,  
SAN FRANCISCO.

## THE FIRST NATIONAL GOLD BANK OF SAN FRANCISCO, CALIFORNIA.

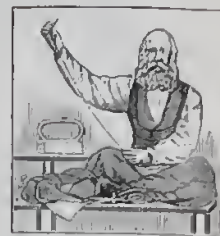
Paid-up Capital.....\$4,500,000  
Surplus Fund and Undivided  
Profits.....\$ 280,000

President.....H. C. WOOLWORTH  
Vice-President.....D. CALLAGHAN  
Cashier.....E. D. MORGAN

DIRECTORS:  
H. C. Woolworth, F. & D. Donahue,  
D. Callaghan, Isaac Worringer,  
C. A. Baker, James Phelan,  
George A. Low, James Moffit,  
H. N. Van Bergen.

Correspondents:  
LONDON.....BANK OF MONTREAL & CO.  
BANK OF MONTREAL & CO.  
PARIS.....LANE, LOYARD & CO.  
BOMBAY.....HUTCHINSON & CO.  
HONGKONG.....PROVINCIAL BANK OF IRELAND.  
SINGAPORE.....RESSE NEWMAN & CO.  
NEW YORK.....NATIONAL BANK OF COMMERCE.  
BOSTON.....BLACKSTONE NATIONAL BANK.  
CHICAGO.....FIRST NATIONAL BANK.

## NICOLL, THE TAILOR, (Branch of New York), PHELAN'S BUILDING, 816 and 818 MARKET STREET,



cordially invites the public to visit his new store, where they will see the largest and choicest stock of English and Foreign specialties in Woollens for the Spring Season. Give us a call.

**WALK RIGHT IN.**  
Examine our New Styles, Prices and Quality. Civility to all. No trouble to show goods. Lightest and Largest Tailoring Establishment on the coast. Satisfaction guaranteed. Store lighted by Electricity.

## THE FAMOUS ENGLISH TINSEL SUITINGS.

The golden threads among the green,  
The silken threads blended in between,  
The silver threads mixed in with brown—  
All colors in wool as soft as down.

## TO ORDER:

Pants from .....\$ 5 00  
Suits from..... 20 00  
Overcoats from..... 15 00  
Dress Coats from..... 20 00  
Genuine 6x Beaver Suits  
from..... 60 00  
Black Daeskin Pants from 7 00  
White Vests from..... 3 00  
Fancy Vests from..... 6 00  
English Cords for Hunting Suits

## SAMPLES,

With Instructions for Self-measurement  
with our Gazette of New Fashions,  
SENT FREE.

## NICOLL, The Tailor, Men's Furnishing Department,

Also invites attention to his New Furnishing Department—Is the largest stock of the finest English make.

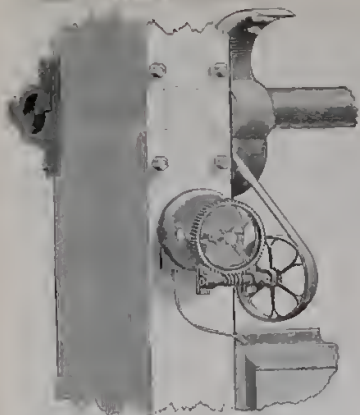
**MEN'S UNDERWEAR,  
WHITE AND COLORED SHIRTS,  
CASSIMERE AND BLUE FLANNEL OVER-  
SHIRTS,  
PLAIN AND FANCY HALF-HOSE,  
NECKWEAR,  
SUSPENDERS,  
HANDKERCHIEFS,  
COLLARS AND CUFFS.**

## NICOLL, The Tailor, Ready-made Department, Has a large stock of Men's, Boys' and Youth's **READY-MADE CLOTHING**

Of the Newest Patterns and Improved Styles  
of our own manufacture and warranted  
shrink. Men's Suits from \$15. Boys' Suits  
from \$5.00. Children's Suits from \$3.00.  
SPECIAL ATTENTION paid to pattern  
from the country.

## NICOLL, The Tailor, PHELAN'S BUILDING, Market Street, SAN FRANCISCO.





The above cut illustrates a new and very complete little machine, invented by C. H. Baker, M. E., for feeding quicksilver into the batteries of gold quartz mills. The mechanical contrivance and operation of it is about as follows:

Within the circular box, the lower part of which also acts as a quicksilver reservoir, just back of, and cemented with the shaft of the gear wheel, is a hollow tube, or arm, at right angles with the shaft. On its outer arm it has a bulbous head, with set screw at its base, which allows of a small cavity of any desired capacity being formed below the level of the apex of two oblique passages which communicate from the opposite sides of the exterior of said bulbous head to the interior passage in arm running to the hollow shaft of gear wheel before spoken of. The *modus operandi* would be this: Power being applied, by means of belt, from main shaft to small pulley on right, transmitted thence by worm to worm wheel, would dip hollow arm down into quicksilver reservoir, and, as it slowly turned and changed levels, all surplus quicksilver above the set-screw cavity would flow back into reservoir through the oblique holes, until, as the arm continued to revolve, (the exterior of said oblique passages being brought thereby higher than where they join in the center of arms), and reached its highest point, the drop would flow down and out of shaft into tube leading to battery. The machine having few parts, and being very simple in construction, need not get out of order, and cannot be worn out within any reasonable time. Already it has proved its adaptation to the work, feeding once in ten or fifteen minutes, or even in thirty minutes, a large or small dose, as may be required, the quantity being regulated in a moment by a set-screw, without stopping. Heretofore this has been done by hand, and subject to the attention or inattention of the operators of mills, and often, from necessity, much gold is lost for want of the proper feeding of quicksilver. It is put at the low price of \$35, with all the fittings necessary to put it to work; weight, 70 lbs.

Manufactured by the Globe Iron Works, 232 & 234 Fremont street, San Francisco, Cal.

## CALIFORNIA MARKET,

CALIFORNIA STREET TO PINE,

Between Montgomery and Kearny Streets.

The Leading Market of the Pacific Coast.

DEPOT FOR THE CHOICEST MEATS, FISH, POULTRY, FRUIT, VEGETABLES, AND DAIRY PRODUCE.

Goods purchased in this Market need no other recommendation.

THOS. BROWN, Superintendent.

THE MOST COMPLETE PRINTING AND PUBLISHING HOUSE ON THE PACIFIC COAST.

## PACIFIC PRESS PUBLISHING HOUSE



BOOK AND JOB PRINTING, BOOK BINDING, ENGRAVING—ELECTROTYPING, STEREOTYPING, ETC.

Orders by Mail or Express will receive prompt attention. Business Men and Manufacturers contemplating having illustrated Catalogues or Lists of any job printing, fine press work printed, should send to us for estimate before ordering. We make a specialty of fine illustrated work, and refer to the appearance of our various specimens as a specimen of what we can do in this line.

Address PACIFIC PRESS, Oakland, Cal.

### HOPS.

The early growth of California Hops neither met with favor at home nor abroad; they were said to be rank and bitter and devoid of keeping qualities.

About 1870, they were a glut here at ten cents per pound, and one intelligent grower, in that year, told me he despaired of ever raising a really No. 1 article in California.

He had been cultivating his ground for several years; had made quite an improvement in the mode of drying (I think he had patented it; had been very careful in picking and drying his last crop, but was in despair about the ultimate success. I had been using his hops and found them remarkably good, and advised him to ship direct to England—to this, however, he was decidedly opposed at first, as he had, years before, sent some from the same yard with the most unsatisfactory results. I explained to him my theory of the matter, which was, that new soil contains a vast amount of alkalis and substances detrimental to their keeping qualities; that hops greedily absorb these matters and carry some part of them into the extract; there they produce rancid and acetic fermentations but retain all the bitter. After arguing the matter with him some time, he concluded to send 100 bales to England. Messrs. Bass & Co. bought some of them, and the ale made from them took the prize at Sydenham in 1871.

This brought the foreigners into our market next season, and hops ruled at 50 cents per pound. This price, of course, being very remunerative, many went into hop-raising, and comes our next heavy set back.

Knowing the aversion brewers have to hops from new soil, many of the growers sold their crop without name or brand on the bales. Unprincipled men, for immediate gain, took advantage of this and put on favorite brands, with the result that might be expected, and the fair fame of our State suffered severely. The same practice has been carried on again this year, and unless a stop be put to it it will be worse next year. As your excellent paper reaches almost all the growers, I would suggest through you, that they lose no time in getting a bill before the Legislature compelling every grower to have a specific brand, recorded at the State capital; that it be a felony to sell or remove a bale or package of hops without the grower's brand being placed legibly thereon; and that it be a felony to copy, counterfeit, use or remove another's brand. This may be crude, as I have stated it, but something of the kind is absolutely necessary.

I would remind them that growers North are much more careful than we are, and it behooves us to look well to our laurels. There is no place on earth can equal California, if due care is observed. Respectfully, C. WILMOT.

### THE EIGHTH TIME.

D. J. Staples, President of the Firemans Fund Insurance Company, has, for the eighth time, been elected, unanimously, president of the San Francisco Board of Fire Underwriters. This is a very high compliment to confer upon any gentleman, and shows that Mr. Staples has discharged the responsible duties of the position with credit to himself and benefit to the association.

### THE BALDWIN HOTEL.

It Passes Under the Management of a Veteran Proprietor.

On the first day of last month the Baldwin Hotel passed under the management of H. H. Pearson. The Baldwin has, ever since it was opened, been recognized as the leading hotel of this coast, and its final passage into the hands of Mr. Pearson insures the highest maintenance of its reputation. In erecting the Baldwin the wisest care was exercised to produce a building superior to any hotel hitherto constructed, and during the six years it has been open to the public no partition has been discovered in which more beauty or better convenience could have been secured. Every one of the six stories is arranged to the minutest detail for the comfort and pleasure of guests, for whom it has a capacity of 600. The building is fire-proof, strongly constructed, located in the most central spot in the city, close to the mansions of Nob Hill, and to the midst of all places of amusement. For the stranger in San Francisco no other hotel is as well situated, and with regard to

### The Equipments of the House.

They are not surpassed on the continent. The rooms and furniture are handsome and comfortable, the attendants numerous and well trained, and the table bears the best fare in the State. The Baldwin is one of the best prominent sights that catch the eye of the visitor as he reaches the city, and is known not only to the traveling communities of the East, but far into the Old World, as a place *par excellence*. The office makes as perfect a picture of magnificence as marble floors and counters, plate-glass and polished woods, all kept scrupulously clean, can offset. Loungers are prohibited from the office, and ladies can attend to business at the counter without injury to the finest sensibility. Splendid parlors for the accommodation of the guests, graced with fine paintings, plate mirrors, rich carpets, tapestries and elegant furniture. Throughout the house are electric bells, messenger calls and every conceivable convenience. In the lower halls are tropical plants and everywhere some object of beauty. For the pleasure of male guests, a first-class billiard room, patronized by the best gentlemen to the town, and one of the best bars in the city, are located on the ground floor. A barber shop is also adjacent to the office, and hot and cold baths can be enjoyed without leaving the house, bathrooms and closets being

### Connected with Every Suite.

The dining-hall, situated in the second story, is a masterpiece of art, elegant in every detail, and equalled in its delights only by the epicurean fare with which its tables are laden. For six years the Baldwin has been the chosen abode of more tourists and country visitors than any other two hotels in the city. The people of this State and Oregon, Washington, Nevada, and Arizona know that their wants can be better catered to there than anywhere else, and whenever any public assemblage calling the attendance of interior delegates, is held in this city, they make their headquarters at that place. Especially since Mr. Pearson has taken charge will this experience continue. Mr. Pearson is one of the oldest and most successful hotelkeepers in the United States. He was almost born to the business, and has been connected with hotels ever since he was ten years old. He has, at some time, been connected with nearly all the best hotels on the Coast, and it was under his management that the old Cosmopolitan became so popular on this slope. He buys everything needed for the hotel first hand, refusing to deal with middlemen, and insuring his guests the best articles to be bought in the market, without being compelled to stint them in quantity to offset commissions and outside profits. He has taken care to surround himself with the best men in the hotel profession, and hosts a corps of assistants which cannot be rivaled.

### Bruck, Harklebergh,

Chief clerk, belonged to the St. George, of Sacramento, in its halcyon days, then to the Russ House, the Occidental, the Cosmopolitan, and the Grand, being in all these places one of the most popular clerks of the last 25 years. M. A. French, the cashier, was connected with the old Rosette House, and was cashier of the Occidental, under the management of the Leland. H. S. Greely, chief caterer, has had a wide and lasting experience. He has acted in the same capacity in the International, of Virginia City, Nevada, the Arlington, of Santa Barbara, the Alcazar, of San Jose, the Gaitero House, of Oakland, the Occidental, of this city, while managed by the Leland, and has just been secured from the Edmund House of Portland, the leading hotel of the whole Northwest. The night clerk is H. G. Pearson, son of the proprietor, who is also experienced in his business, and never fails to satisfy people with whom he has any transactions. It requires only a casual visit to the Baldwin to obtain it credit for being uniformly managed, and a single transaction with Mr. Pearson satisfies the visitor that his comfort will be able attended to, with the advantage of moderate charges for the most

### Superior Accommodations.

Any man, single, and bent on pleasure, or married, and with the comfort of a family to secure, as well as business men, who will spend one day under the care of Mr. Pearson and his assistants, will not fail to complete the term of his house in the city under the same genial influences. Broad generosity, wide experience, and keen judgment enable the new management to satisfy and respond to the wants of guests, before demands can be made for attention. No doubt can exist as to the outcome of Mr. Pearson's venture in undertaking to run the Baldwin. The hotel itself affords greater opportunity to please the public than any other within the collection of the oldest inhabitants, and the proper care is attended, by the whole profession, to the power of perceiving wants, satisfying them, and charming strangers, as well as friends, in the greatest degree. From time to time, the press has lauded the beauties of the hotel, and, since plumper days, the abilities of Mr. Pearson have received acknowledgment wherever that gentleman was located, and now, that the best hotel

and the best hotel proprietor are brought together for public recognition, the heartiest commendation can be accorded them, without hesitation, and with truthful emphasis.

### FIREMANS FUND INSURANCE CO.

The twentieth annual statement of this company, before us, shows that the past year, although unfortunate to underwriting, in general, has been a profitable one to this company, which exhibits both a handsome increase in business and in net surplus.

The career of this company, during the past twenty years, makes a complete record of the insurance business of California; for not only did the company issue the first fire insurance policy of any Pacific Coast company, now in existence, but, at the time of the Chicago fire, one of the five California companies represented throughout the East, the Firemans Fund alone promptly met every liability, and managed to cull the hours and profits of a general business throughout the United States, paying in that year alone more than its entire capital, and for nearly ten years thereafter was the only representative of California underwriting east of the Rocky Mountains.

In all the great conflagrations of the past few years—Chicago, Boston, Virginia City, Portland, Oregon—as well as in its full share of the less prominent fires which have swept our country so constantly, of late, the Firemans Fund has been prominently interested, and has, during its time, by the payment of losses aggregating many times its capital, earned and sustained a character for integrity and ability which has placed it in the very front rank of the underwriting.

In 1847, the Firemans Fund, which had up to this time been doing an exclusively fire insurance business, commenced Marine Underwriting also, that department being placed in the charge of Wm. J. Dutton, the Company's present secretary. At that time there were six other locals and a number of foreign agencies actively engaged in this department of underwriting. Throughout all the vicissitudes of the Marine business during the past sixteen years, during which several companies have discontinued their Marine departments, and the solely Marine local has retired from business, the Marine branch of the Firemans Fund has been uniformly profitable and has increased in volume until 1882, the Marine premiums of the company were nearly if not quite double those of any other American company organized west of New York State.

### THE BREAD WE EAT.

In these days of so much food adulteration, it is a matter of pleasure for us to be able to recommend the New England Baking Powder being all that is claimed for it, which is put up in cans of full weight, and composed only of the best qualities of cream-of-tartar and bicarbonate of soda; which all medical and chemical authorities agree, when combined in proper proportions, constitute a "pure baking powder." In view of the many brands of baking powder in the market, a deliberated with inferior ingredients, to take the place of one or the other above costly materials, and put extra profit into the pocket of the unscrupulous manufacturer, it behooves our readers and the general public to be careful in their choice of a baking powder for use at home; and we know, from practical experience, that the New England brand will give far better satisfaction than anything else of the kind obtainable. Practical trials invariably show the New England baking powder to produce the best results in cooking, while the reports of eminent medical men and chemists satisfactorily prove that it is composed only of cream-of-tartar and soda, combined in such nice proportions to evolve the highest amount of leavening gas, and hence aid materially in turning out the lightest and most wholesome bread and biscuits and cakes; such as all good housekeepers desire to set on their tables.

### ANALYSIS.

The old adage, "the proof of the pudding," etc., whilst being a very homely one, seems to express so much, and appears to be so appropriate, that we append, herewith, the proof, as ascertained with *Perman Bitters*. An assay, to determine the quantity of the various alkaloids contained in the *Cinchona Rubra* bark, is necessary to the preparation of every batch of *Perman Bitters*. This comes regularly, without which this *Sovereign Panacea* would never have acquired its present well known reputation. With this, all may feel assured that everything is being done to prove that the article referred to is entitled to the confidence reposed in it; and the public may rest assured that so color or pains will be spared in keeping *Perman Bitters* up to the mark claimed—the best of the kind.

Assay, by Jas. G. Steele, Pharmaceutical Chemist, San Francisco, Cal.:

Eight Troy ounces of *Cinchona Rubra* bark gave 153 grains of alkaloids.

Quinine	45 grains.
Quichuilla	39 "
Quinidine	33 "
Quichoula	36 "
	153 grains

### THE CALIFORNIA MARKET.

This market, under the able superintendence of Thos. Brown, gives entire satisfaction to its very many patrons. This market always contains the best of everything—the choicest fruits from many tropical California, and, also, from all parts of the world. All the dealers in all the various departments of this market are polite and courteous to its patrons. Mr. Brown has had charge for many years, in a very acceptable manner to the public. The display always there to be found strikes visitors from almost as soon as they enter, for there is no day of the year that the finest fruit and freshest of vegetables may not be seen.



## SAN DIEGO COUNTY.

(CONTINUED FROM FIFTEENTH PAGE.)

from its mouth, and directly opposite the mouth of the Gila. This is considered the hottest place on the Coast, as there are, on an average, 350 clear days in the year. There are a number of smaller towns and precincts in the county. The population in 1880, of this vast scope of country was 8,618, but will number fully 12,000 at present.

## SAN FRANCISCO COUNTY.

In May, 1850, the City of San Francisco first entered upon its formal and legally recognized existence as an independent municipality. The County of San Francisco had been first organized the month preceding. For upwards of 50 years the two distinct governments contemporaneously maintained independent administrations with the same geographical limits. On the first of July, 1876, the Consolidation Act, uniting the two, under the name and title of "The City and County of San Francisco," was passed. Although but 27 years have elapsed since the accomplishment of this consolidation, reckoning from its independent birthday of May, 1850, 33 years in May of the present year, will be the exact age of the city. The total land area of the city and county is 26,881 acres, by far the smallest county in the State; its average breadth from ocean to bay being four and one-half, by six and one-half miles in length. The peninsula on which the city is located is about 30 miles long by fifteen wide, the city and county occupying the western end. There are 1,097 streets, avenues, and alleys, which appear on the map of the city, and 27,550 buildings, about 5,000 of which are brick; the balance is of wood. There are 92 church

unusually large amount of beer manufactured in San Francisco. A number of our largest brewers are increasing their capacity. There are three distilleries in the State, two of which are in this city. The manufacture of cigars and tobacco has largely increased during the past year. There are about 500 white men, 200 white females, and 4,500 Chinese employed in the manufacture of cigars. About 70 malt and shoe establishments are in the city, employing 3,500 hands; it is estimated that fully 2,000 of these are Chinese. The manufacture of clothing and underwear has increased from 25 to 40 per cent., but we are unable to obtain the exact figures so early in the year. We have six extensive hosiery factories, employing 450 men and boys; besides a number of smaller establishments of this character, there are a large number of important industries that cannot appear in so brief an article as this, such as powder works, bag factories, silk factory, jewelry works, carriage and wagon factories, billiard table works, wine tank builders, sash, door, and blind factories, soap works, agricultural works, mirror works, glue factories, type foundries, trunk factories, terra cotta works, shiner works, furniture factories, harness and saddle factories, fruit canneries, oil works, marble works, cracker bakeries, glove factories, etc. It is impossible to give a detailed description of the metropolis of the Pacific Coast in an article as brief as we are obliged to make this, but the fine bird's-eye view, with its hundreds of ships and steamers, from all parts of the world, lying at anchor, will give our Eastern and European readers a fair idea of San Francisco.

## SAN JOAQUIN COUNTY.

Is bounded on the north by Sacramento, on the east by Amador, Calaveras and Stanislaus; on the south by Stanislaus, and on the west by Alameda and Contra

head of the Stockton channel, on the line of the Central Pacific Railroad, 91 miles from San Francisco by rail, and 117 miles by water. This channel is a wide and deep arm of the Sacramento river, which is navigable for vessels of 800 tons capacity. The city extends over an area of four square miles. The character of its buildings are generally very substantial and good, the business portion being built almost entirely of brick. A system of street railroads affords easy accommodation between various parts of the city. Stockton is regarded to be the most important grain market of the Pacific Coast, outside of San Francisco. The deep, navigable channel, radiating from the river into different points in the city, give a convenient water front of many miles in extent, such as is not possessed elsewhere in the State. Substantial wharves have been built, with an aggregate length of nearly a mile. In facilities for transportation, Stockton is unusually fortunate. Railroads radiate from this center in all directions; north, south, east, and west, connecting directly with the entire Sacramento and San Joaquin valleys, the mountain country on the east, San Francisco on the southwest and the Eastern States by both the Central and Southern Pacific Railroads. A daily line of steamers runs between Stockton and San Francisco, besides numerous other craft, carrying thousands of tons of grain to San Francisco, and returning with coal, lumber, and merchandise.

The manufacturing industries of Stockton are only second to San Francisco. This, being a central location, convenient to the great Mount Diablo coal fields, fuel may be delivered cheaply by water communication; in fact, the facilities for freight and fuel material of all kinds, either by water or rail, are not excelled by any locality on the Coast. Stockton has made rapid strides in her manufacturing during the last five years. Two

whent. The town contains about 200 people. Ten miles south from Stockton is

## Lathrop.

The junction of the Central and Southern Pacific railroads; it contains a splendid hotel, where all trains stop for refreshments. About fifteen miles southeast of Lathrop is

## Tracy.

The junction of the Central and San Pablo and Tulare division of the Southern Pacific Railroad, 83 miles from San Francisco via the new road, and 71 via Livermore. The town contains about 100 people. The other towns in the county are: New Hope, 60 inhabitants; French Camp, 75; Atlanta, 50; Aramibo, 75 to 100; Benton, 50; Delhita, 50; Collegedale, 50; Elliott, 50; Peters, 10.

## SAN LUIS OBISPO COUNTY.

Lies on the west coast of California, between latitude 35 and 36 degs., north. The distance from San Francisco by steamer to Port Harford is 201 miles; and from the latter place, by rail, it is nine miles to the town of San Luis Obispo. The boundaries of the county are north, by Monterey; on the east by Kern, on the south by Santa Barbara, and on the west by the Pacific Ocean. It contains 2,972,400 acres, 481,847 of which are covered by Mexican grant titles, and 1,541,552 acres are United States Government titles. The county lies between the Coast Range mountains and the Pacific Ocean, and is divided by the Santa Lucia range into two unequal parts, about one-third lying west of this range and two-thirds east, and both parallel with the ocean in a north-easterly and south-westerly direction. It is well watered on the west side of the range of mountains by numerous small living streams that head up in the mountains, and by springs which find their way west



D. R. JONES &amp; CO.'S ISLAND MILL, EUREKA, H. B., CAL.

organizations, all of which have houses of worship in various parts of the city. Twenty-three large brick business blocks have been added, all of which are four and five stories high; besides these over 250 dwellings have been built or commenced during the year. They are generally well, two-story bay-window, modern-style houses, costing from \$2,000 to \$10,000. Several very elegant residences, costing from \$30,000 to \$50,000, have been built in different portions of our city.

## Manufactures.

There are some 830 different manufacturing establishments in this city, 297 of these are incorporated companies, and altogether employing 40,000 mechanics, making a total yearly manufactured product of over \$75,000,000; these will be largely increased the coming year. The mammoth hanger refinery of Glass Spreckels, recently completed—a ten and twelve story brick at a cost, including machinery, of \$1,200,000, will turn out, when in full operation, 600 tons of sugar per day. There are 32 iron and twelve brass foundries in the city; one rolling mill, giving employment to 450 men and boys; two wire rope factory, employing some 60 hands; three glass works, two of which were established in 1861, furnishing employment for 250 men and boys, who are principally engaged in manufacturing bottles, jars, and small wares; no window glass has as yet been made, but it is the intention to start such a factory this year; one rope walk, furnishing employment for 50 men and 120 boys, ten flour and six feed mills are constantly employed, furnishing flour and feed, which is largely exported to foreign countries; 60 tanneries are represented in this city; some of these, however, are located in different parts of the State, and have their headquarters here. We also have 31 breweries in this city; the Kern, located in the Sierra Nevada mountains, has its headquarters here, and the Fredricksburg, of San Jose, has also an agency. There is at

Costa Conchita, it has an area of 928,000 acres, 870,287 acres of this is owned and assessed, thus leaving only 57,713 acres for waste land, which is river-belt and some broken land in the northeastern and southwestern portion of the county. It is watered by the San Joaquin River, which passes through it from south to north, spreading into three channels a few miles above Stockton and taking in its embrace two of the largest islands in the State. No streams of any importance enter it from the west, but on the eastern side, within the limits of the county, the Mokelumne and the Stanislaus rivers join the San Joaquin, with a flood sufficient, in certain seasons, to render them navigable for a considerable distance, and furnish a supply of water adequate to the irrigation of the lands lying between them, embracing the richest section in the county.

The soil of the river bottoms is a rich sandy loam, well adapted to the growth of sweet potatoes, hops, corn, peanuts, flax, hemp, jute, ramie, alfalfa, melons, small fruits, vegetables and all manner of root crops, producing abundantly. The county occupies a most favorable and important position, on account of its accessibility to the markets of the world, its navigable streams, its excellent railroad facilities; its large area of fertile soil, of the most productive character. While grain growing predominates over all other stock raising forms no inconsiderable part of the industries of the county. Improved blue-blooded horses, cattle, sheep and swine have been imported from other countries, giving the live stock of this section a widespread reputation. For the past few years many of the finest horses in the State have been bred in this county. Raising and the raising of fine cattle are carried on to some extent, while sheep husbandry is quite an important industry.

## Stockton.

The county seat of San Joaquin county, is located at the

of the largest and most complete flouring mills on the Coast were built here last year. Paper mills, several extensive agricultural machine shops, tanneries, wooden mills, extensive carriage and wagon factories, and ship-building furnish employment for more men than any other city of its size on the Coast.

## Lodi.

Twelve miles north from Stockton, has sprung into existence since the construction of the C. P. R. R., and is now a beautiful village of 1,300 inhabitants. It is located in one of the best agricultural and fruit sections in the State. Two and one-half miles northwest from Lodi is

## Woodbridge.

Beautifully situated on the banks of the Mokelumne river, at the head of navigation, fourteen miles from Stockton. This is one of the oldest places in the county, and was a distributing point for supplies for the miners in early days; it is on the edge of the foothills. Eight miles northwest from Lodi is

## Lockford.

In the center of a fine farming community. Lockford is more thriving now than for many years past, and it contains a population of 450.

## Hodson.

Twelve miles east of Stockton, is surrounded by the richest farming lands in the county. This section is beautified by scattered oak trees, giving the landscape an appearance. The town contains about 150 inhabitants, and the surrounding country is considered the first wheat-producing section in the county. Sixteen miles from Stockton, on the line of the Stockton and Copperopolis Railroad, is the village of

## Perrinburg.

Which is surrounded by a rich farming country. The farmers in the vicinity are nearly all engaged in raising

to the ocean. The Salinas and San Juan rivers, with their numerous branches, bond in the southeastern portion of the county, running in a northern direction into Monterey county.

The soil in the valleys on the west side of the range of mountains, is extremely fertile, being generally of a black adobe and loam nature, the latter predominating. The valley lands are well adapted to raising grain, principally barley, flax, oats, and wheat. The rolling and hilly portions of these lands are nearly the same soil, only not so rich, and are better adapted to dairying. On the east side of the range of mountains the soil is more of a gravelly nature. The rainfall here is light and the climate warm. The soil is well adapted to raising grain, fruit, and grapes. At present large lands of sheep are kept upon it.

About one-fourth of San Luis Obispo county may be considered as mineral lands. Chrome iron ore and quicksilver are found in many places, in paying quantities.

## San Luis Obispo.

The county seat, is located about nine miles from the sea coast and is connected by San Luis Obispo and Santa Maria Valley Railroad with Port Harford the shipping point for the town. The city is nestled between the hills on the San Luis creek; it is an old Spanish settlement, first settled in 1772 when the old Mission Church was established. Up to the year 1878-9 it remained a town of a few adobe buildings, with only a few hundred inhabitants, when the American settlers came in and built up the town; at present, it has fully 3,000 inhabitants. The San Luis Obispo & Santa Maria Valley Railroad has recently been extended from Port Harford, east the city, to

## Arroyo Grande.

A distance of 31 miles south. This place has a popular



tion of 600, and is situated in a fine agricultural section.

**Cayuse.**  
On Estero bay, is about 20 miles north from Port Har-  
ford, and as many south from San Simeon. The land-  
ing was located in 1853, and a town was soon afterwards  
laid out. A good, substantial wharf is built, with first-  
class warehouses and storage room for shippers, where  
the Pacific Coast steamers make regular visits twice a  
week up and down the coast. The town has sprung up  
within the last two years, and now has several hundred  
inhabitants. Land in this vicinity is considered the  
best dairy land in the State. It is principally settled  
by Swiss dairymen. The village of Morro is situated a  
few miles south on the coast. Here is a natural harbor,  
on Morro bay, where a wharf has been built. In the  
vicinity the land is sandy, and it is better adapted to  
farming than dairying.

**Cambria.**  
Is pleasantly situated in a canyon, 34 miles north from  
San Luis Obispo, and about two miles inland from Ref-  
ingwell's Landing, where schooners call in winter, and  
passenger steamers in summer. The town has 300 in-  
habitants, a good school, five stores, and two carriage  
and wagon shops. Its chief support is the dairy inter-  
est. Several rich quicksilver mines are in the vicinity,  
but are not worked, at present, on account of the low  
price of the metal. One hundred miles distant, is

**San Simeon.**  
The finest landing south of San Francisco. It possesses a  
good wharf and warehouses, and the Pacific Coast  
steamers call twice a week. The Government has  
erected a lighthouse. The town is small, and the land  
for miles around is all owned by one man.

The Paso Robles hot and cold sulphur springs are 28  
miles from San Luis Obispo by stage. These springs  
are famous throughout the United States, and are vis-  
ited by tourists and those seeking health from all parts  
of the world.

The other towns in the county are Cholame, Joseph-  
ine, La Panza, Mastic, Pozo, and San Miguel, which  
are all quite small. In 1880 the population of this  
county was 9,142, but the railroad has been extended,  
and many of the large "ranchos" are being subdivided,  
and settlers are taking advantage of these cheap, pro-  
ductive lands, so that the present population is fully  
10,000.

#### SAN MATEO COUNTY

Occupies most of the peninsula that separates the ocean  
from San Francisco bay, and is bounded on the north  
by San Francisco; east by the bay and Santa Clara; south  
by Santa Cruz, and west by the ocean; it has an area of  
292,500 acres. The shore lines, on both ocean and bay,  
are exceedingly irregular. The Gabilan Sierra Moreno,  
or Santa Cruz mountains, traverse the entire length  
and occupy nearly one-half of its surface; yet, fully  
one-half of San Mateo county is susceptible of cultiva-  
tion. On the east, or bay side of the county, is one of  
the finest little valleys in the State. On the ocean side  
there are also from 17,000 to 20,000 acres of level land.  
Besides these, there are several other valleys, such as  
Canada, Raymond, Upper, San Gregorio, Pompona,  
and others of lesser note. This county is only about  
five miles wide at its north end, and some eighteen at  
its southern end, with a length of 42 miles. San Mateo  
is exceedingly well watered by numerous small streams  
and springs; on the ocean side, the most important are  
Pillaretto, Purissima, Lobillas, Tunitas, San Gregorio,  
Pompona, Pescadero, Bu'ono, Gazo, and New Year  
creeks, most of which have considerable fine farming  
lands along their courses through the mountains, often  
opening into considerable-sized valleys. On the bay  
side streams are less numerous, the San Mateo and San  
Francisco being the only ones of much importance,  
although there are many small ones. As is well known,  
San Francisco draws her water supply from San Mateo.  
The Spring Valley Water Company has large reservoirs  
and works along the entire length of the mountains.  
The climate is quite as varied and diversified as the  
surface. It has been truly said that in California one  
may find every variety of climate; from frigid to torrid,  
from Sahara's dryness to perpetual humidity. This as-  
sertion is well illustrated in San Mateo county, except  
that the extremes are not so great as above expressed.  
In the northern portion it bears some resemblance  
to San Francisco's fog and cold winds. In the central  
and southern parts the winds diminish and the climate  
becomes mild and delightful. On the ocean side the  
fog rolls in from the Pacific, and keeps vegetation green  
the greater part of the year. This county has every  
variety of soil, the most of which is very fertile. The  
productions are barley, hay, oats, wheat, potatoes, cab-  
bage, and all root crops. Shipping facilities are excel-  
lent. Along the ocean vessels call at various places in  
summer, but in winter the south winds make it danger-  
ous. Along the bay side schooners and small crafts  
pass up and down the bay, while farther inland the S. P.  
R. R. passes through one of the finest improved val-  
leys on the coast. During the last twenty years, the  
successful business men of San Francisco have built  
beautiful country residences along the line of the rail-  
road for nearly its entire length, extending to San Jose,  
a distance of fifty miles. Small towns are scattered  
throughout the county.

#### Railroad City

The county seat, is most beautifully situated along the  
bay, on the east side, with both water and railroad  
communication. It is only 39 miles south of San Fran-  
cisco, and has about 1,500 inhabitants. In its vicinity  
are some of the finest country residences in California.

#### Spainborough

The second largest town, is situated on the Coast,  
on Half Moon Bay, in a fine agricultural country. It  
contains about 1,000 inhabitants. San Mateo, Menlo  
Park, and Belmont are really suburbs of San Francisco,  
as they contain many of her wealthiest citizens.

#### Pescadero

Lies along the southern end of the county. It is a fine  
summer resort, and is surrounded by an excellent  
agricultural country. The other towns are Bearville,  
Millbrae, Woodside, Menlo, Purissima, and San Gre-  
gorio. Formerly this county had large forests of red-  
wood saw timber, but most of it has been cut. How-

ever, it still has considerable timber, which is fast be-  
ing rapidly converted into lumber. The population of  
this county, in 1880, was 7,074; but, at the present writ-  
ing, it would amount to fully 9,000.

#### SANTA BARBARA COUNTY

Lies between San Luis Obispo on the north, Ventura on  
the east, Santa Barbara channel on the south, and the  
Pacific ocean on the west. The islands in the Pacific,  
some 20 or 30 miles out, belong to this county. Below  
Point Conception the coast line bends sharply to the  
eastward and parallel with this line is the Santa Ynez  
range of mountains, from 3,000 to 4,000 feet in height,  
traversing the county, from east to west. Beyond the  
range, running in a northwesterly direction, lie the San  
Rafael mountains. A large portion of the northwestern  
part of the county is a rugged, mountainous region, con-  
taining a few small valleys which are fertile, but the  
balance is a rocky, barren waste. Between the Santa  
Ynez mountains and the bay lies the celebrated Santa  
Barbara valley. This valley is unparalleled in the  
world for its healthy, equable climate, the islands in  
the ocean breaking the winds. The most delicate  
flowers bloom every day in the year, and invalids come  
here from all parts of the world, and many of them  
permanently settle here. The soil of this valley is of a  
dark, sandy loam. The shortest way of reaching

#### Santa Barbara

is by way of the Coast steamers, a distance of 400 miles  
southeast. The town lies within a space of three miles  
square, gradually rising from the sea to an elevation of  
300 feet. Here may be seen the best preserved old Mis-

sion, a few years ago, no sign of a habitation could be seen for  
miles, except, occasionally, a hunter's camp. Now,  
beautiful farms, fields of grain, cottages, and school-  
houses greet the eye on every hand. Lompoc has about  
500 inhabitants, and it will, ere long, be a railroad  
town, as the S. L. O. & S. M. road is to be extended  
from Arroyo Grande, which is now completed from  
Port Harford, a distance of 30 miles. Between Lompoc  
and Santa Barbara is the village of

#### Guadalupe

Near the boundary line of San Luis Obispo; it is situ-  
ated in a fine agricultural country, and has about 100  
inhabitants. Central City, a small village some ten  
miles east of Guadalupe, has a pleasant climate, and  
the surrounding scenery is very attractive. Los Alamos  
is a small settlement on the rancho of the same name.  
The Los Alamos valley, which is of extraordinary fer-  
tility, is mostly rented in small tracts to farmers.

#### Corpenteria

Is in one of the most fertile valleys in California, which  
is mostly devoted to the culture of the Lima bean. It  
is sheltered by mountains on three sides, and opens to  
the sea. It is situated on the line between Santa Bar-  
bara and Ventura counties. A new industry has just  
been inaugurated here, viz., the cultivation of flowers  
for distillation, such as roses, violets, jasmynes, orange  
flowers, etc. The village in the valley, of the same  
name, has several hundred inhabitants.

Golden is a small village, eight miles north west of  
Santa Barbara, and claims 200 inhabitants. The popu-  
lation of Santa Barbara county in 1880 was 9,580,  
which has increased, within the past two years to about 10,000.



ORANGE ORCHARD IN SOUTHERN CALIFORNIA.



CLUB HOUSE, SAUCELITO, CALIFORNIA.

along in the State, with its whitewashed, adobe walls.  
It is still occupied by the order of Franciscan friars,  
the early archives, and, perhaps, the most correct early  
history of California. A few miles distant are the  
mountains, towering several thousand feet above the  
town. The city, at present, has 6,000 inhabitants; but,  
whenever railroads enter this favorite spot it will  
become the great sanitarium for consumptives and in-  
valids from all parts of civilization. In the gardens of  
Santa Barbara may be seen the palm from India and  
other delicate plants from China, Australia, Africa, and  
South America. Tropical jasmynes, the cedars of Leb-  
anon, the Egyptian paper plant, the honey tree of south  
Africa, the camphor tree of Japan—in fact, one can see  
a greater variety of choice and rare plants, trees, and  
flowers at Santa Barbara than in any other spot in Amer-  
ica in the open air.

#### El Montecito

A charming valley, about four miles eastward, contains  
many handsome residences, and is, properly speaking,  
a suburb of Santa Barbara. This valley lies close to the  
foothills, and opens to the southwest into the sea. The  
farms are mostly small, and under a high state of culti-  
vation. The banana, a native of the south sea islands,  
may be seen growing here, and, in some places in this  
vicinity, the land is heavily timbered. Water is abun-  
dant throughout the valley. A large portion of the  
county is well adapted to farming, but has hitherto  
been held by large land-owners, and wholly devoted to  
sheep-raising; but, lately, some of the great "ranchos"  
have been subdivided.

#### Lompoc

Is in the north-western portion of the county, where, a

#### SANTA CLARA COUNTY.

This is one of the most prominent counties in all  
California in agriculture, horticulture, climate,  
and beauty of scenery. It is bounded on the north by  
Alameda, on the east by Stanislaus and Merced, on the south by San Benito and on the west by Santa Cruz and San Mateo counties. It has close connection with San Francisco by three lines of railroad, also water communication via the southern arm of San Francisco bay.

The topographical features of the county are the two ranges of mountains on either side, with the large valley of Santa Clara between, a level, fertile plain, running down from the northwest to the southeast the entire length of the county; it is about 54 miles in length and from 12 to 18 miles wide. The western boundary line of the county runs along the summit of the Santa Cruz moun-  
tains, the highest elevation being Mt. Diablo, 3,700 feet above sea level. The eastern line runs along the summit of the Mt. Diablo range, the highest point, Mt. Hamilton, being 4,410 feet high; this is the location for the Lick Observatory, the history of which the readers of "The Resources" are doubtless familiar with. The county has an area of 623,728 acres.

Santa Clara has no large rivers, the largest stream, sometimes called a river, is the Coyote, which rises in the eastern range of hills, and unit-

ing with several smaller streams, flows southward some twelve or fifteen miles, where it breaks through the hills about twenty miles south of San Jose and on into the bay. The Guadalupe, a stream of nearly the same size, rises in the western hills about fifteen miles distant from San Jose, seeks the center of the valley and flows past the western portion of the city of San Jose, where it forms a junction with Los Gatos creek, thence on to the bay. San Felipe creek forms the southern boundary line between this and San Benito county; it takes a southern direction, emptying into Pajaro river. Numerous smaller streams flow into the valley, their waters sinking into the gravel as they reach the plain; but few counties have better water facilities than Santa Clara. The most interesting feature of the valley is the flowing wells. Artesian water is obtained in the country around the head of the bay, and extending southward to and including the city of San Jose, in fact to the extreme southern portion of the county. In the vicinity of San Felipe large flowing wells are easily obtained, varying in the different localities from 50 to 350 feet.

No better soil is found in the State than Santa Clara valley possesses. It varies, in some places, being a rich adobe many feet in depth, in others a black sandy loam, and in others of a reddish gravelly loam with clay mixed with decomposed rock. This latter is regarded as the natural soil for the grape, the choicest and tenderest foreign varieties of which grow here to perfection. On the hill sides the soil is mostly of a gravelly and clay nature, making the best of orchard and vineyard land, where the almond, pear, apple and many other varieties of fruit are successfully raised. Many small valleys are scattered through the mountains on either side of the Santa Clara valley.

There is an abundance of live and white oak, cottonwood and several other varieties scattered through the valley, besides, thousands of eucalyptus trees have been planted, some of which are three feet in diameter and from 50 to 100 feet high. In the mountains, on the Mt. Diablo range, there is some pine, while on the Santa Cruz range there is considerable redwood.

It is difficult to give a correct description of climate in California, as it varies so much with every locality. Santa Clara valley is so peculiarly situated, just across the first range of mountains and at the south end of San Francisco bay, that it certainly has the finest and most invigorating climate in the State. On the coast range, in the Mt. Diablo division, snow falls in winter. Very little snow ever falls in the Santa Cruz range, and in the Santa Clara valley snow seldom ever falls. Frosts sometimes occur severe enough to destroy the most tender plants, but never to interfere with the growth of grasses or grain of any kind. The rains fall from December to April, and occasionally as late as May. This is not a continuous rain, as some may suppose, but showers, sometimes continuing for several days, then there are weeks of pleasant weather; this constitutes the winter in this valley. Fruit trees shed their leaves as in the East. Eucalyptus, live oak, and an endless variety of other trees put on their dark green foliage in the winter months, when everything is brown and sear in the East. In the summer the cool trade winds sweep the coast regularly each day, commencing at about ten o'clock each morning and continuing until sunset. In the remote valleys, beyond the reach of the trade winds, the summer heat is intense, while in the coast valleys, like Santa Clara, Napa, Sonoma and many others where the winds are broken by ranges of mountains, the summers are mild and salubrious, neither too hot or too cold.

#### San Jose

Is the county seat, with a population of 16,000. It ranks first in architectural beauty, location, general neatness and educational advantages of any city in the State. It is connected with San Francisco by three lines of railroads, also water communication to Alviso, within six miles of the city, the distance by either line is from 47 to 52 miles. San Jose is handsomely laid off, with broad straight streets, beautifully shaded. It has a system of street railroads through different portions of the city, two competing lines to the town of Santa Clara, a distance of three miles; one out to the Willows, where may be seen the finest orchards in the State. San Jose has an abundant water supply. Los Gatos creek is brought in pipes from the Santa Cruz mountains, besides the numerous artesian wells throughout the city.

#### Santa Clara

Is the oldest town in the county, dating back to 1777, the time of the establishment of the Mission. It is a beautiful town of 2,500 inhabitants, only three miles from San Jose, and is connected by two lines of steam and two lines of horse railroads. This is quite a manufacturing town. Between San Jose and Santa Clara is Pajaro City; really it is an continuous town between the two cities along the famous Alameda Avenue.

#### Los Gatos

Is distant from San Jose about ten miles to the southwest, on the line of the South Pacific Coast



Railroad, and at a point on the Los Gatos creek where the Santa Cruz Gap opens out on the Santa Clara valley. The town is 308 feet above sea level, and has a population of 750. The place is much sought for by people of weak lungs.

#### Alviso

Is situated at the head of navigation on the Bay of San Francisco and on the line of the S. P. C. R. R., and at one time, before the railroads were built, was quite an important point. It has some of Santa Clara's largest brick warehouses, a flouring mill, one store; a line of daily steamers from here to San Francisco.

#### Agnew's Station

Is on the S. P. C. R. R., between San Jose and Alviso, in a fine fruit and farming country.

#### Gilroy

Is situated in the extreme southeastern portion of the county on the S. P. R. R., 30 miles from San Jose. The town contains a population of 1,600, and is a fine agricultural country in the Santa Clara valley. A daily line of stages run from here to the famous Gilroy Hot Springs. There are several other small towns in this county: Milpitas, on the S. P. R. R., 42 miles from San Francisco, and Mayfield, a nice little town, only 33 miles from San Francisco. Santa Clara county contained 35,097 inhabitants in 1880, which would number 38,000 at the present time.

### SANTA CRUZ COUNTY

Lies on the coast between latitude 36.30 and 37.20 degrees north, nearly south of San Francisco; distance by rail, 80 miles; steamer, 78 miles. Santa Cruz is one of the smaller counties of the State, embracing 276,400 acres, about one-third of which is fertile valley, plateau and rolling hill land, and fully 40,000 acres of rich bottom land. The county is about 36 miles long from a northeasterly to a southwesterly direction, and nearly fifteen miles wide. It has about 50 miles of coast along the ocean and Monterey bay, which bounds it on the west and southwest. On the south it is bounded by Monterey county, east by Santa Clara and San Benito, and on the north by San Mateo counties. The county is exceedingly well watered, first by San Lorenzo river and its numerous branches, heading up in the northern portion of the county, running in a southern direction and emptying into Monterey bay near the city of Santa Cruz. Soquel creek heads on the east side of the county and takes a southern direction to the bay of Monterey. San Benito creek forms the southern boundary line between this and Monterey county.

The country facing south from the summit of the Santa Cruz mountains, which forms the northern and eastern boundary, makes an amphitheater of almost perfect aspect facing the bay of Monterey on the south and protected by high wooded hills on the east and north, the highest point, Loma Prieta, is some 4,000 feet above sea level.

Pajaro valley, one of the most charming and productive valleys in all California, is in the southeastern portion of the county. This valley is about fifteen miles long and from six to ten miles wide. The soil is of the richest garden land, seemingly inexhaustible. The valley is situated close to the sea, with a railroad running through it, and it is made up of beautiful fields, fine orchards, deep alluvial bottom lands and fertile hillsides, winding streams fringed with trees, and here and there several beautiful lakelets, a range of cloud-covered mountains on the northeast, the dancing surf of Monterey bay on the southwest. Northward, near the mountains, is Carrizales valley, running in an opposite direction, a beautiful stream by the same name running through it. Further up is Green valley, which extends up to the timbered mountains, where the redwood timber belt is reached, which extends the entire length of the county, affording good facilities for lumbering roads up the canyons, making the redwoods accessible for lumbering.

The county is well supplied with railroads and shipping facilities. The Santa Pacific Coast Railroad is a direct line from San Francisco to Santa Cruz (distance 80 miles) through the most romantic scenery on the coast. The railroad connecting Santa Cruz with Pajaro via Watsonville, has recently been purchased by the Southern California Railroad Company, and will be changed into a broad gauge. The Pacific Coast Steamship Co. have a regular established route here; besides there are numerous other vessels constantly visiting this port for lumber, lime, leather, powder, grain and dairy products.

The town is well built. The business houses are on the principal street, and are mostly built of brick. The Watsonville Mill and Lumber Company, headquarters of the redwood lumber trade of the coast, ships from ten to fifteen million feet of lumber annually.

The third town in the county is the village of

#### Watsonville

Situated seven miles from Santa Cruz, up the San Lorenzo river, and on the Santa Pacific Coast Railroad. This is quite a lumbering and fine producing place. There is a V. I. mine, extending fourteen miles up into the redwood forests, where su-

perior saw-mills are located, manufacturing lumber and shingles, and floating down the flume to the railroad, where it is shipped on the cars to San Francisco. The Santa Cruz Big Tree grove is but one and one-half miles from here.

#### Soquel

The fourth village in size in the county, is located four and one-half miles east from Santa Cruz, on the Watsonville and Santa Cruz Railroad, and two miles from Monterey bay, in a rich agricultural country. A paper-mill, saw-mill, and tannery are located here. The place has many attractions, and contains 200 inhabitants.

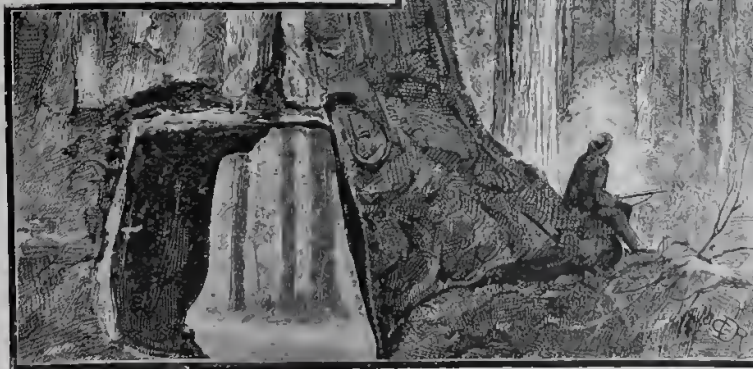
#### Antos

Lies between Soquel and Watsonville, eight miles east of Santa Cruz. Mr. Claus Spreckels owns a large estate here, and has erected a magnificent hotel for the accommodation of summer travel. The location is a very desirable and picturesque one. The hotel stands on high ground overlooking Monterey bay, and is flanked by lawn and beautiful flower beds; pretty cottages for families are tastefully grouped in the grounds; every inconceivable in the way of amusement, is offered here. The county contained 12,800 inhabitants two and one-half years ago which has increased to fully 15,000.

### SHASTA COUNTY

Lies not far from midway between the two most important ports on the Pacific Coast, viz.: San Francisco and Portland, Oregon. It is directly on the overland route from Mexico to British Columbia, the connecting link to complete which is now being built between Redding, Shasta county, California, and Roseburg, Oregon. The great Sacramento valley ends in this county. Shasta county is bounded on the north, by Siskiyou and Mohave; on the east, by Lassen; on the south, by Tehama, and on the west by Trinity. It has an area of 2,410,000 acres, and the Coast Range and Sierra Nevada mountains meet within her borders. The consequence is an immense number of canyons, gorges, valleys, and ravines, through which the upper Sacramento, or Pitt, and McCloud rivers rush, forming a junction with the Sacramento, which takes its rise in a large spring, at the base of Mount Shasta, in Siskiyou, about 90 miles above this junction. Shasta has large forests of valuable sugar and yellow pine saw timber, besides the oak and other timber in the valleys, valuable for fuel only. In the southern end of the county, at the head of the Sacramento valley, are the principal agricultural lands. Further north is Shasta valley, an extensive plain, which is occupied chiefly as a range for cattle and sheep. Besides these there is a large number of small valleys, ranging from a few acres to several hundred.

However, Shasta's great wealth is in her min-



BIG TREES, MARIPOSA GROVE.

eral resources, which are scarcely yet prospected, although her gold mines have yielded millions of dollars, since the days of '39. After the exhaustion of the surface gravel diggings, which have been marvellously rich, caused the miners to study out the problem of where the gold, which came to feed the gulches and creeks, came from, prospecting for quartz ledges followed. The result has been most encouraging. In every direction ore has been discovered, and a number of quartz mills has been erected within the past few years. Many of the discoveries of quartz ledges are without means to prosecute work on a large scale; but, in these instances, miners are used profitably. In some places these primitive machines turn out from \$1,000 to \$1,500 per week. A number of small towns throughout the county are sustained by the mines, the largest of which is

#### Redding

The county seat, some seven miles from Redding, with a population of about 1,200. Shasta is quite a pretty little mountain town, on the line of stage routes to Watsonville and Yreka. The United States land office, for upper and central California, is located here. There are yet large bodies of Government land in the district, suitable for fruit cul-

ture, which will soon be occupied, as the railroad is being built.

#### Redding

The present northern terminus of the O. R. of the C. P. R. R., is a growing town. It is the largest town in the county, and contains 1,500 inhabitants. Freight trains from Yreka, Santa's valley, Big Valley, Copper City, Waverlyville, Mount Shasta, and all directions centralize here for the distribution of supplies and merchandise.

#### Anderson

Is a beautiful little village on the railroad, twelve miles south of Redding, in a fine agricultural country. It has a population of 250. Five miles south, in the same valley, and also on the railroad, is

#### Cottonwood

In the extreme eastern portion of the county. Large amounts of wool, sheep, and cattle are shipped from here to Sacramento and the bay.

#### Wickiup town

Is a mining town, five miles north from Shasta, in the western part of the county. There is a number of good paying gold, quartz, and placer mines in the vicinity. The place contains about 150 inhabitants, principally miners.

medicinal qualities, which are bringing them into notice. Castle Lake, near Castle Rocks, is one of the most picturesque scenes in California. The Clover creek falls are 50 feet high, and are considered quite romantic. To the tourist the natural scenery is grand and sublime, and second only to Yosemite. Mount Shasta's stupendous beauty has inspired the minds of painters and poets with its grandeur, such as no scenery on the Coast has ever done before. It is visible from all northwestern California, towering with its perpetual snow-covered peak, 14,400 feet above sea-level, and is just across the line in Siskiyou. Shasta is but sparsely settled to what it will soon be. At present the population is about 10,000.

### SIERRA COUNTY

We now come to the most elevated county in California, the lowest point within its limits being over 2,000 feet above sea-level. It derives its name from the Sierras, which cross the county from north to south, embracing the whole of its territory. Sierra is bounded on the north, by Plumas county; on the east, by the State line of Nevada; on the south, by Nevada, and on the west by Yuba, while Butte forms its north-western border. Sierra has an area of 531,200 acres, extending east and west some 60 miles, and 30 miles from north to south. It is generally acknowledged that Sierra has some of the grandest, wildest, and most exhilarating mountain scenery on the Coast. Some of the highest peaks reach 10,000 feet above sea-level. Table Rock, Saddle Rock, Mount Fillmore, and Fir Cap all reach 6,500 feet, and Sierra Buttes is nearly 9,000 feet. This is one of the landmarks of the State, and from its summit, looking westward, can be seen the vast black timbered ranges intervening between the huge overhanging the valley of the great Sacramento, while in the dim distance, darkly outlined upon the horizon, is the Coast Range. Below, north and south, are seen the great gorges of the north and south branches of the Yuba river. This beautiful romantic scenery and delightful climate are rarely equaled in any part of the country. It is enriched with magnificent coniferous forests of red spruce, white or balsam fir, cedar, sugar, and yellow pine timber, of which there are 35,550 acres, with an estimate of over 200,700,000 feet of saw timber in the county.

Mining, in its various branches, is the chief industry. The extensive gravel mines found here have been worked since the discovery of gold in California. Crossing Sierra in a northerly direction is a continuation of the rich, ancient river channels that pass through Nevada county. These have yielded millions, and will insure profitable returns for centuries to come. At first, the beds and shores of the Yuba and other streams were so rich in gold that fortunes were easily made with the pan and rocker. But as these were soon exhausted, more costly modes of working had to be adopted to find the secreted treasure. It was discovered that under the mountains of volcanic lava existed channels of ancient rivers, in many cases richer than those that had been worked. There are a number of good paying gravel mines, among which we might name, in southern Sierra, the Golden Star, North Fork, and a number of others. In the northern part of the county, commencing at the lower end of the gravel range, and going northward up the stream, we come to the Fair Play and the Union Hill; adjoining these are the Cleveland and Sierra, and farther up is Fort Wain, also a very rich place, where hundreds of thousands of dollars have been taken out. Then follow Cedar Grove, Greenwood, St. Louis, or Seal's dry diggings. Still farther up the channel, so deeply covered with lava as to render hydraulic mining possible, we find drift mining has been resorted to. At Union, Hawkeye, Pittsburg, Monumental, and Kureka are located some of the richest hydraulic and drift mines in the State. There is an abundance of water in this county for mining purposes, and most of these mines own and use a good water privilege.

Quartz mining is now the leading industry. There are ten mills in the county, five of which were in operation this season, crushing over 100,000 tons of quartz. Some of the most prominent ore bodies are those of the Sierra Buttes, located near Sierra City, and discovered in 1851; they have been in operation ever since. The company are, at present, running 50 stamps. For the first twelve years' operation of these mines, the gross yield was \$1,700,000, and the net profit \$1,063,000. The ore is of a low grade. The mills have a very large capacity. The water for driving the machinery is brought from Sunshine and other lakes, at an elevation of 6,200 feet, at great expense. The present average yield of these mines is over \$20,000 per month. Near by are the Magerita, which have a twenty-stamp mill. Besides these there are the One thousand and one, Blue Gravel, Washington, Kureka, and New York. In the vicinity of Gold Lake are the Woodchuck, Wilson & Davis mine, Phoenix, Hawkeye, Keystone, Marquis, Volcano, Lady's canyon, and a number of others. There is a good prospect that this heretofore bewich

#### French Gulch

Fifteen miles north from Shasta, is one of the oldest mining towns in northern California. The famous Deadwood mines are in this vicinity. The place has about 200 people. The principal agricultural town in the county east of the Sacramento river, is

#### Marysville

Containing 100 inhabitants. This place lies twelve miles east of Anderson, and has a good mountain trade.

#### Copper City

Lies in the central portion of the county, surrounded by some of the best paying mines in the northern part of the State. South and west from here is a number of smaller towns, such as Centerville, Hamletown, Poley Hill, Donoville, and Igo, the last of which is the most important. On the east side of the Sacramento river is a number of small towns, all supported by the mining interests in the immediate vicinity. Farmerville, Buckley, Churchtown, Borgerville, Parkville, and Dog Creek. About 100 miles east from Shasta is Fell River, a lively agricultural town of 250 people. Lower Soda Springs is situated some 60 miles north of Redding. The waters of these springs have



of mining will be extensively prosecuted in the near future, as the vast mining resources of Sierra become more thoroughly developed. Nearly all of the cultivated land is located in Sierra valley, which is situated in the eastern part of the county, at an altitude of 5,000 feet. This valley contains about 45,000 acres of good farming land.

#### Daviesville

The county seat, which was settled in 1849, is situated on both sides of the Yuba river. The town lies in a deep canyon, enclosed on all sides by mountains fully 2,000 feet high. Daviesville was once the busy center of the richest gravel region in California. The streams are spanned by two beautiful bridges. Like all mining towns Daviesville is irregularly laid off, the streets following the bend of the river.

#### Sierra City

Is supported exclusively by miners, as it is one of the richest quartz mining sections in the State. It has a population of 2,200, and has a lively appearance.

#### Forest City

Has a population of 800. The Bald Mountain mines, located here, have yielded over \$2,000,000, and paid \$820,000 in dividends. The

#### Mountain House

Is a general stage center, 35 miles northeast from Nevada City. Stages run from here to Nevada City, via Camptown, to Downieville and to Marysville, making connection with all the mountain stages throughout northeastern California.

Sierra's other towns are Goadyear's Bar, Monte Christo, Scales, Poverty Hill, Mount Pleasant, Morrisville, Gibsonsburg, and several other mining camps.

#### SISKIYOU COUNTY.

The largest in northern California, with an area of 3,890,000 acres, is bounded on the north, by Oregon; on the east, by Modoc county; on the south, by Shasta and Trinity, and on the west, by Humboldt and Del Norte. As the two great ranges of mountains meet, the surface consists of canyons, gorges, ravines, abrupt mountain walls, precipices, and sudden little valleys. Mount Shasta, the grandest peak in the State, is a part of the Coast Range, or rather between the two ranges it is situated, in the southern part of the county, at the foot of which are several extensive valleys that lie at an elevation of from 2,000 to 4,000 feet above sea-level. In the northeastern part of the county lie the lava beds, described in Modoc county. All of the north-eastern part of the State, embracing Modoc, Lassen, and the eastern part of Siskiyou, is called the "central basin," and consists of an elevated plateau, from 3,500 to 4,000 feet above

sea-level, and surrounded by steep mountains, rising from 6,000 to 10,000 feet high. The whole tableland was formed by some great volcanic overflow of a former period. Two great rivers start toward the sea from Siskiyou: the Klamath to the west, and the Sacramento to the south. The numerous streams enter into one or the other of these rivers. Some of these, like the McLeod and Pitt rivers, are considerable streams, tumbling through stony canyons, rocky ravines, over abrupt cliffs, around little green valleys, and are certainly some of the most picturesque mountain streams in the State. The principal industries of this county are mining, stock-raising, and lumber.

The gold mines, both placer and quartz, are among the first in the State. In early times they were confined to the bed of the creeks; and the development of even these claims was greatly retarded by the serious difficulty of traveling so long a distance from San Francisco, Yreka, the county seat, being 428 miles north. It is still 120 miles by stage from Redding, but will soon be within bearing distance of the whistle of the iron horse, on the great road between San Francisco and Portland, Oregon. Then mining machinery can easily be brought in for the development of the rich quartz lodes known to exist. In addition to gold, silver, copper, iron, coal, chromite, and quicksilver are found in the county. The agricultural resources are becoming quite important. An increased acreage of land is being annually cultivated. The valleys of the rivers, especially the Klamath, Shasta, and Scott's rivers, northwestern Siskiyou, and the lake region, taken as a whole, contain

many thousand acres of fertile lands, all susceptible of cultivation. Fruits, vegetables, and cereals all do well. The whole country is particularly well adapted to stock-raising. Hay, for winter, is raised upon the meadows along the streams, while the hillsides are covered with bunch grass. The valleys all afford good summer pasturage, but the fall of snow is heavy at this altitude. Large amounts of good Government land are not yet taken up. The mountains and hillsides are clothed with forests of sugar and yellow pine lumber, and will be a great source of revenue to this county, as soon as the railroad is completed.

#### Yreka

The county seat, is situated on Yreka creek, in the western part of Shasta valley, and contains about 1,500 inhabitants. The town was located in 1851, and is the oldest one in this part of the State. It has always been an important place, as nearly all the overland travel between California and Oregon passes through it. It is strictly a mining town, is 2,500 above sea-level, and has a good, healthy climate.

#### Port Jones

The second largest town, lies some eighteen miles south from Yreka. It has about 500 inhabitants, and is an important business center.

#### Etow Springs

In the same valley, is a thriving place of some 400 people. It is the headquarters for farmers, miners, and the salmon river freight.

#### Sawyer's Bar

Is a prosperous town in the south-western portion of the county, acquired when Klamath county was

the Yreka valley and Clear Lake road, intersecting with the Central Pacific at Elnir, thus the facilities for transportation, either by rail or water, are the best in the State. The townships of the county are mainly natural; on the south and east is the Sacramento river, Suisun and San Pablo bays, and the Straits of Carquinez. Putah creek forms the line on the north between this and Yolo counties, and the summits of the Sycold hills and Blue mountains form the line between this and Napa county on the west. The census of 1880 gave Siskiyou a population of 17,480, which has increased rapidly within the past two years, and we may safely count on 20,000 people within her borders at the present writing. Two-thirds of the land in the county is being cultivated. About 90,000 acres are swamp and overflow lands; fully 10,000 acres of this are mud flats, left bare at low tide, and about 45,000 acres are partially reclaimed and fitted for agricultural and grazing purposes. Mount Shasta hills occupy the southeastern portion of the upland of the county. The northern and eastern parts of the county, embracing about 200,000 acres, are a level, fertile plain.

Pleasant valley is located in the south-western portion of the county, north across the entire county. This little valley is noted for its peculiar, genial climate, being free from frost.

The Assessor has classified the lands of Solano county into five grades. The first, of about 40,000 acres, is the very best quality of vegetable and fruit lands, and, in point of richness and productivity, cannot be surpassed in the State. The second comprises the best quality of grain land, of

such slough. There are a number of small streams, such as Ulatitis creek, in the vicinity of Vacaville; Alamo creek, near by; Pleasant valley creek, Suisun creek and Sulphur Spring creek. Solano is but sparsely timbered with oak and pitch pine. The city of

#### Vallejo

Located at the headwaters of San Francisco bay, is the largest city in the county, and contains about 6,500 inhabitants. It is the terminus of the California Pacific Railroad, and the ferry, which runs up to North Vallejo, connects with all trains over the Central Pacific and Southern Pacific railroads, on the opposite side of the Straits of Carquinez.

#### Benin

Is one of the oldest cities in California, beautifully located upon the Straits of Carquinez, in view of the Golden Gate. It has a population of 3,000. The Central Pacific Railroad Company have recently built their main trunk line through this section, crossing the straits on their monster steamer "Solano," the largest ferryboat in the world. Benin has taken on a new life since the impetus given it by the railroad. The place has new gas works and new water works. Baker & Hamilton have established the largest agricultural works on the Pacific coast here.

#### Suisun City

At the junction of the Central Pacific Railroad, is at the head of navigation inland. Suisun has a population of about 1,200. The town is built on an island, with low, level land on all sides. About one-half mile west is

#### Fairfield

The county seat, a small place of 600 inhabitants. The fourth town, in point of population, is

#### Dixon

It has about 800 inhabitants. The next largest town is Vacaville, in the western portion of the county, and situated in one of the best fruit and grain sections of the State.

Rio Vista is the next town of importance in the county, and is located in the eastern part on the Sacramento river. It has a population of about 800.

Elnira is situated at the junction of the C. P. R. R. & V. V. & C. L. R. R., and has about 350 inhabitants.

Colusa, on the Sacramento river, and Batavia, on the Central Pacific Railroad constitute the towns of Solano county.

#### SONOMA COUNTY

Is bounded on the south by the Bay of San Francisco (this portion of which is called San Pablo Bay) and Marin county, on the west by the Pacific Ocean, on the north by Mendocino county, and on the east by Napa and Lake counties. The highest peaks are Mt. St. Helena, 4329 feet, and Geyser Peak, in the northeastern part, 3,470 feet high. On the west side of the county the highest elevations are Mt. Palo, 2,600 feet; Table Mountain, 2,440 feet high, and Mt. Hood, 1,500 feet high. Between these ranges of mountains several large and fertile valleys extend north-westerly.

West of Sonoma valley, and separated from it by a low range of mountains, is the main great valley of the county, running from San Pablo bay in a northwestern direction the entire length of the county. The southern portion of this large and fertile plain is called Petaluma valley, the central portion is known as Santa Rosa valley, and the northern portion as the Russian river valley. Besides these there are several other extensive valleys.

The area of Sonoma county is 850,000 acres, and the present population is 25,000. The natural curiosities of Sonoma are remarkable, such as the world-famed Geysers. Lateral Springs are another curiosity, where Seltzer water is obtained. White Sulphur Springs, Skaggs' Springs, Mark West Springs, Alder Glen Springs, all have different medicinal qualities.

No more diversified soil can be found in any county than Sonoma possesses. Fruit and other crops thrive here. And in no other county in California, with so much fine agricultural land, has such immense forests of timber. At Guoraville, twenty miles northwest of Santa Rosa, and at the terminus of the S. F. & N. P. R. R., we come right into the heart of the redwood country. Here are found extensive saw-mills, producing from 12,000,000 to 15,000,000 feet of redwood lumber annu-



HOTEL DEL MONTE—Finest Summer and Winter Resort on the Coast.

divided between Siskiyou, Humboldt, and Del Norte counties. Several rich quartz mines are in the vicinity. There are a number of smaller villages scattered all over this mountainous country, among which we may mention Bolen, Butterville, Ball's, Bostville, Colar Park, Dorcas, Deindwood, Dangel's, Fairfield, Franklin, Rest Park, Gilligan's Bar, Humbug Creek, Hawkinsville, Hooperville, Lincoln, Little Shasta, Quartz Valley, Scott's Bar, South Fork, Table Rock, Upper Sochi Springs, Vineland, and a number of others. The population of Siskiyou, in 1880, was 8,410, which would number fully 10,000 people at this time.

#### SOLANO COUNTY

Is one of the most important agricultural and fruit counties in California. It has no superior and scarcely an equal in the variety and extent of its soil. For early fruits and vegetables it stands first on the list, always sending to the San Francisco markets the first of every variety known and grown in Northern California. It is one of the smaller counties of the State, having an area of 576,570 acres. It is very generally located, its southern boundary line being within 27 miles of San Francisco, with an uninterrupted water front of over 60 miles, 25 of which are on the Sacramento river, 25 on Suisun bay and the Straits of Carquinez, and ten on Napa and San Pablo bays.

Railroads traverse the entire county in various directions: first, the California Pacific runs diagonally across the county, from south to north, and the Central Pacific has recently built its main trunk line along the eastern border of the county;

about 250,000 acres. The third, a lower grade of farming land, includes the swamp and overflowed lands, with an area of 250,000 acres. The fourth grade comprises the partially reclaimed swamp lands, being of an alkali soil, and constitute about 75,000 acres. The fifth grade, of 100,000 acres comprises the swamp and overflowed (unreclaimed) lands, and the high mountain ranges, unproductive, as yet, except for pasture. The highest elevation is Blue mountain, some 3,000 feet above sea-level, located along the line between this and Napa counties.

The Sacramento valley embraces the greater part of the northern and eastern portion of the county. Suisun valley lies west of the Suisun hills, running north from the city of Vallejo, a distance of some eight miles by about three in width. Suisun valley is about six miles square, and lies north of the bay of the same name. Pleasant valley, which lies in the western portion of the county, is some twelve miles in length, with an average length of one and one-half miles. Besides these there are Green valley, sulphur Spring valley and a number of smaller valleys in the western and southern portions of the county.

The Sacramento, the largest river in California, forms the eastern boundary line. Putah creek, which takes its rise in Lake county, forms the northern boundary line, flowing in an easterly direction, winding through a rich, level plain for twenty miles, then is lost in the tides which flow along the Sacramento river. Suisun creek rises in the Yuba hills, six miles north of the town of Vacaville, flowing in a northwesterly direction to the vicinity of Main prairie, then empties into

the bay of San Francisco. On the west side of the county the highest elevations are Mt. Palo, 2,600 feet; Table Mountain, 2,440 feet high, and Mt. Hood, 1,500 feet high. Between these ranges of mountains several large and fertile valleys extend north-westerly.

West of Sonoma valley, and separated from it by a low range of mountains, is the main great valley of the county, running from San Pablo bay in a northwestern direction the entire length of the county. The southern portion of this large and fertile plain is called Petaluma valley, the central portion is known as Santa Rosa valley, and the northern portion as the Russian river valley. Besides these there are several other extensive valleys.

The area of Sonoma county is 850,000 acres, and the present population is 25,000. The natural curiosities of Sonoma are remarkable, such as the world-famed Geysers. Lateral Springs are another curiosity, where Seltzer water is obtained. White Sulphur Springs, Skaggs' Springs, Mark West Springs, Alder Glen Springs, all have different medicinal qualities.

No more diversified soil can be found in any county than Sonoma possesses. Fruit and other crops thrive here. And in no other county in California, with so much fine agricultural land, has such immense forests of timber. At Guoraville, twenty miles northwest of Santa Rosa, and at the terminus of the S. F. & N. P. R. R., we come right into the heart of the redwood country. Here are found extensive saw-mills, producing from 12,000,000 to 15,000,000 feet of redwood lumber annu-



ally. California laurel is a hard wood, a beautiful evergreen, the timber which takes a high polish, and is used extensively for veneer. This tree is found among the redwood forests of California. Madrone is another hard wood that is becoming valuable for the manufacture of furniture, shoe lasts, etc.

Russian river is the largest stream in the county. There are several smaller streams, such as Gualala river, Mark West creek, Santa Rosa creek, Sonoma creek, and Sulphur creek. Sonoma has the following railroads: the main line of the San Francisco and North Pacific; a branch has recently been completed *via* San Rafael, which makes connection with the N. P. C. R. R., and the passengers from both roads are transferred across the bay on the latter road's beautiful ferry, which is a great convenience to the Russian river and upper country travel; the old route is by way of Donahue, a distance of 56 miles; a branch from Filton, a few miles west of Santa Rosa, to Guerneville, a distance of sixteen miles; Sonoma Railroad, from Sonoma Landing to the town of Sonoma; the North Pacific Coast Railroad, running north of San Rafael, along the coast, a distance of 80 miles; the upper end of this road runs through Sonoma county from Valley Ford to Duncan's Mills, a distance of eighteen miles, where it terminates in the great redwoods of the county.

#### Santa Rosa.

The county seat, with a population of 4,700, is situated in the center of the valley, on the S. E. &

road is now completed from Sonoma Landing into the valley for a distance of fifteen miles. The entire valley is taken up with vineyards. Sonoma valley is from eighteen to twenty miles long, and from one to six miles in width. There are about 700 people, of nearly all nationalities.

#### Cloverdale.

At the head of Russian river valley, is the terminus of the S. F. & N. P. C. R. R. It has a population of 800.

Filton is the junction of the S. F. & N. P. C. R. R. and the Guerneville branch.

#### Guerneville.

One of the liveliest towns in California for its size, has four extensive saw-mills, which cut and ship about 12,000,000 feet of redwood lumber annually. In the vicinity of Guerneville is the Great Eastern Quicksilver mine, at present employing twenty men, and producing 100 flasks of metal per month; the Mount Jackson mine, near by, producing about 50 flasks per month. Besides the four mills in operation in Guerneville, there are two at Occidental, on the N. P. C. R. R. Ten miles further west, at the terminus of this railroad, and at the mouth of Russian river, are

#### Duncan's Mills.

Producing large amounts of lumber annually. We make the following estimate of standing redwood yet in Sonoma county: In the vicinity of Guerneville, 100,000,000; Occidental and vicinity, 25,000,000; Duncan's Mills, 75,000,000; headwaters of the Gushla, 150,000,000; total, 325,000,000 feet. Sum-

and which have a gentle, uniform slope, favorable to irrigation, are generally in a position to be well watered from the Stanislaus and Tuolumne rivers, and on the south from Tulare lake. The San Joaquin canal, on the west side, now irrigates some 20,000 acres, and is intended to be carried on down through the county in the near future. This is an excellent opening for fruit culture.

From the best authority we could obtain, we would rate the price of land as follows: Within a radius of ten miles of Modesto, which is the central portion of the county, the soil of which is a light, sandy loam, and at present is farmed to wheat, is valued at from \$40 to \$50 per acre. Recently several large orchards have been planted in this vicinity. The land on the east side of the San Joaquin, and between the Stanislaus and Tuolumne rivers, is considered the best land in the county; it is valued at from \$15 to \$50 per acre, the latter figure embracing the best improved farms. Immediately east of the San Joaquin river, from one to five and six miles wide, the soil is an alkali and salt grass, and the land is only fit for grazing; it is valued at from three to ten dollars per acre. In the eastern portion of the county, along the foot-hills, the soil is red-lawn, which is summer-fallowed, and two crops of wheat are raised in three years; this is excellent vineyard land. North of Stanislaus river the soil is a dark loam, some of which is adobe. On the west side, or between the San Joaquin river and the summit of the Coast Range of mountains there are some 90,000

largest town. It has a population of 350, and is surrounded by a large section of fine agricultural country.

#### Knight's Ferry.

The former county seat of Stanislaus county, is located in the foothills, on the Stanislaus river, near the eastern boundary of the county. It was once a flourishing mining town, but has since been abandoned to 200 people, who are principally engaged in agriculture, fruit-growing, and wine-making. The river furnishes excellent water-power. A flour mill is located here, and some 300 Chinese are chiefly engaged in gravel gold mining. The other towns in the county are Grayson, Salida, La Grange, and Cores, the latter being the largest. It is located on the S. P. R. R., and is the shipping point for large quantities of wheat.

In conclusion we will say that the present population of Stanislaus county is 10,000. Considerable gold mining is still carried on in the vicinity of Knight's Ferry and La Grange, principally by Chinese, of which there are 1,370 in the county. When this county is subdivided, and water is brought in from the mountains, and the lands properly irrigated, Stanislaus will become one of the wealthiest counties in California.

#### SUTTER COUNTY.

Was one of the twenty-seven counties into which the State of California was divided in 1849. It comprised part of what are now Placer and Butte counties. Its present boundaries are: on the north,



MARSHFIELD MILLS, HUMBOLDT BAY, CALIFORNIA.

N. P. C. R. R. It possesses colleges, fine water-works and several street railways.

#### Petaluma.

Numbers 4,500 people. It has excellent drainage, and its streets are well graded. It is well watered by the Sonoma County Water Works, and is lighted with gas.

#### Healdsburg.

Sixteen miles northwest from Santa Rosa is, one of the handsomest towns in all California, and now has a population of 2,000. It is situated on a rise of ground between the two valleys, on the line of the S. F. & N. P. R. R. It is well built, and has fine, wide, graded streets, handsomely shaded, and is lighted with gas. It has an abundant water supply. The climate is one of the finest in the State, and no better land can be found in any county than in the vicinity of Healdsburg. The uplands cannot be excelled for fine grapes and excellent fruits. Here we notice the superior tillage of small farms.

Healdsburg has fine churches and excellent public schools. A few miles above, on the line of the railroad, is Litton Spring college, one of the most romantic and healthy places in the State.

#### Sonoma.

Sonoma's early history dates back to 1835, when it was laid out by General Vallejo, who is still living here. Sonoma valley is about 50 miles from the north from San Francisco, and is one of the most eligible points for a country residence. Its soil is most fertile and highly productive. Its climate is very equable and delightful. The Sonoma Valley Rail-

road is now completed from Sonoma Landing into the valley for a distance of fifteen miles. The entire valley is taken up with vineyards. Sonoma valley is from eighteen to twenty miles long, and from one to six miles in width. There are about 700 people, of nearly all nationalities.

#### STANISLAUS COUNTY

Is situated in the great San Joaquin valley. Its western line forms the summit of the Coast Range of mountains, while its eastern border rests on the foothills or base of the Sierra Nevada. It is bounded on the north by San Joaquin county, on the east by Calaveras and Tuolumne counties, on the south by Merced and on the west by Santa Clara county, thus spreading across the entire width of the valley, and in area it embraces 924,800 acres. The San Joaquin river, a navigable stream for six or eight months in the year, flows across the county some eight miles west of the estimated geographical center. From that stream diverges two tributaries, the Stanislaus and Tuolumne, both lending outward to the Sierras, and both being navigable for three months in the year, are on the east side of the San Joaquin river, which intersects the county from south to north, the soil of the east side being of a sandy nature, verging to a loamy character as the foothills are approached. The soil of the west side is a rich loam of indefinite depth, and, with an abundance of moisture, yields large crops of cereals. The large average yield, in favorable seasons of abundant rainfall, is an indication that when, in the future, a system of irrigation is inaugurated, by which these lands may be plentifully watered, their productiveness will insure the most bountiful returns. The valley lands, which comprise the greater portion,

acres of rich, arable lands, the soil being of a dark, loamy nature, and very deep, from 10 to 100 feet; this is excellent land to produce, when there is sufficient rain, 50 and 60 bushels being raised to the acre. All of this land will be irrigated in the near future, from the San Joaquin canal, which passes through here. Artesian water is easily obtained in the valley by boring 300 feet.

The Southern Pacific Railroad passes through the central part of the county, from San Francisco to Los Angeles. The terminus of one of the branches of the Stockton and Copperopolis Railroad is at Oakdale, which is located on the south bank of the Stanislaus river, 34 miles southeast from Stockton.

#### Modesto.

The county seat, is on the line of the S. P. R. R., 103 miles southeast from San Francisco. It was laid out in the fall of 1870, and possesses a population of 2,300.

#### Oakdale.

In the eastern part of the county, ten miles below Knight's Ferry, and 31 miles from Stockton, contains 950 people. The town site is on a sandy plateau, thickly covered with live oak trees. Oakdale is the shipping point for most of the freight and travel to Tuolumne county, which is here transferred to towns.

#### Turlock.

In the southern portion of the county, on the line of the S. P. R. R., is the central point for a large range of fertile country.

#### Knight's Ferry.

In the south-western portion of the county, on the western bank of the San Joaquin river, is the next

Butte, west, Yuba and Placer, east, Yolo and Colusa, south, Yolo and Sacramento counties. The Sacramento River forms nearly the whole of the western boundary, while the Feather River, after forming nearly two-thirds of the western line, flows through the southern part of the county into the Sacramento. The facilities for navigation and irrigation are unsurpassed, the Sacramento being navigable at all times of the year. So is also the Feather, as far as Yuba City, the county seat. The Bear River, quite a considerable stream, flows through the southern part of the county before it empties into the Feather River.

The Buttes, a collection of mountain peaks, situated in the northern part of the county, rising to a height of 1,000 feet, occupying an area of four by twelve miles, constitute the hilly portion of Sutter county, the balance of its territory being all level, and most of the soil in the county is a rich, black loam, a great portion of which is subject to overflow, caused by the hydraulic mining along the upper Yuba and Bear rivers. A great portion of the finest bottom land, that was first settled as early as 1820 to 1830 is now abandoned, being covered up under 20 feet of sand and gravel by the overflow of these rivers. However, there still remains a large portion of the area of Sutter county as good and productive agricultural lands as there is in the State, producing large crops of wheat, barley, oats, corn, beans, potatoes, hops, onions, hay, and all kinds of root crops. Few places in the State contain handsomer and more comfortable farm buildings than Sutter county, which fact is suggestive of the prosperity of farmers in this lo-



cality. The climate of the upper Sacramento valley is quite hot in summer, but the nights are always cool. Vegetables and fruits of all kinds attain an immense size, on account of the rich soil, long seasons, and abundance of rain.

#### Yuba City.

The county seat, lies on the west bank of the Feather river, only one mile from Marysville. The river here is spanned by a bridge, making communication good, as Marysville lies on the C. P. R. R. (O. D.), only 50 miles north from Sacramento City. The Sacramento river steamers run at all seasons of the year, thus giving the greater portion of the county good market facilities by water. Freight steamers run regularly on the Feather river, from Yuba city to San Francisco, transporting the country produce at cheap rates. Yuba city has a population of only about 700; Marysville, which is so close to it, is the principal commercial center for the upper Sacramento valley. The population of Sutter county is 3,153, principally farmers, although there is a number of small places in the county, with one or two stores, such as Barry, Bear River, Brown's, Brittons, Columbia, Clay, Eagle, Fairview, Franklin, Lee, Live Oak, Murry, Nicolaus, Noy's, Pleasant Grove, Salem, Sutter, Union, West Butte, and Willow Pond. Sutter county is settled by farmers, who have spent large sums of money in levying in the streams, and reclaiming lands which now produce enormous crops.

#### TEHAMA COUNTY.

In the north-western portion of the State, is bounded on the north by Shasta, east by Plumas and Butte, south by Butte and Colusa, and west by Mendocino and Trinity. It has an area of 2,000,000 acres, and the Sierra Nevada occupies the eastern part, while the Shasta mountains, belonging to the Coast Range, are in the west. The middle, between them, is really the northern section of the great Sacramento valley. The Sacramento river flows through it, and the mountains are covered with excellent saw timber, consisting of yellow and sugar pine, and fir is found, especially on the western slope of the Sierras. The lumber interest is second only to agriculture, which is very important, especially in wheat, barley, oats, and hay. There are two kinds of productive valleys: the level lands near the rivers and small hollows in the mountains. Their fertility is a feature of the State. The soil of the valley lands of Tehama is a dark, sandy loam, and very productive. The black adobe lands, formerly considered valueless, have been proved to be some of the very best. By summer-fallowing they produce enormously every second year, and are inexhaustible. Wheat is the largest crop at present. Fruit and vineyard culture are becoming noted in Vineland. Ex-Gov.

Stanford is irrigating it, and preparing it for the planting of the largest vineyard in the world. He has visited the most noted vineyard countries of Europe, and employs hundreds of men. The climate, in the mountains, is nearly perfect; in the valleys the summers are hot, but the nights are cool.

#### Red Bluff.

The county seat, lies on the west bank of the Sacramento river, 27 1/2 miles north from San Francisco. It is at the head of navigation, and also on the O. D. of the C. P. R. R. The city suffered a severe fire in the fall of 1882, but is fast being rebuilt. It is pleasantly situated in a fine farming community, and has a population of about 3,500.

#### Tehama.

The second town in the county, has a very pleasant location, on the west bank of the Sacramento, and at the junction of the California Pacific Railroad and the Oregon Division of the C. P. R. R., twelve miles south of Red Bluff. The C. P. R. R. has recently been extended from Orland, and when completed to Roseburg, Oregon, it will be a great thoroughfare between Mexico and British Columbia. Tehama has a population of 700.

The other towns are Antelope, Butte Meadows, Coast Range, Cascade, Copeland, Cottonwood, Elder Creek, Elkton, Elmore, Elkins, Floyd, Gleasonville, Henlyville, Howell, Hunter, Johnson, Lowery, Live Oak, Lassen, Moore's Ranch, Montgomery, Murry, Oak Creek, Riceville, Ravison, Reed's Creek, Red Bank, Stony Creek, Tahoma, Toomes, Vina, and others. The population of Tehama county, in 1880, was 9,300, but, at present, it would amount to 10,000.

#### TRINITY COUNTY.

Lies in the north-western part of the State, and is bounded on the north by Siskiyou, east by Shasta and Tehama, south by Mendocino, and west by Humboldt. It is about 128 miles long, from north to south, and from 15 to 36 miles in width; it contains an area of 1,680,000 acres. The greater portion is mountains, the Shasta range forming its eastern line, and the Scott's mountains the northern line. The county is named after its principal river, which, with its numerous tributaries, waters the whole of the territory.

Gold mining is the chief support of the county; the gold shipped annually from this county amounts to nearly one million dollars. The population of the whole county is only 4,998, nearly all miners. There are many prosperous mining camps in the county.

#### Weaverville.

The county seat, and one of the prettiest little towns in the mines, contains 750 inhabitants. It is situated on Weaver creek, in a circular basin of four or five miles in extent, and is built on good

mining ground. Some of the lots were worked to the bed-rock before the buildings were erected. It is surrounded by many fine orchards, the fruit of which attains an excellent flavor in this locality.

#### Trinity Center.

On the stage road from Shasta to Yreka, is the second place of importance. The valley has a number of good farms, the produce of which finds ready sale at home to miners, teamsters, and travelers. There are good paying mines in the surrounding hills. Hayfork valley is an important farming region, and there are a number of good farms along the Hayfork and the smaller streams emptying into it. Indian Creek is a mining camp at the head of this stream, on the dividing line between Shasta and Trinity. There are some good paying quartz ledges in the vicinity.

#### Douglas City.

On the Trinity river, at the crossing of the wagon-road from Hayfork to Weaverville, is the central point for a good mining region. Lewiston is also on the Trinity, eleven miles above Douglas City. Two bridges span the Trinity; one at Lewiston, and the other at a small place known as Grass valley, leading out from Weaverville. The Deadwood quartz district is in this vicinity. Minersville is on the east fork of Stewart's fork of the Trinity river, in one of the best gravel mining districts in the county. Cimbar, or Altonna, is the most northern settlement in the county, and is a small place. It is in the quicksilver mines, which are now only partially worked, on account of the metal. Junction City lies southwest of Weaverville, in a good paying gravel mining district. North Fork is some eight miles below Junction, in a good mining district. Cox's Bar lies ten miles below North Fork, surrounded by rich gravel claims. Martinville is in the north-western portion of the county. New River and Rattlesnake are small settlements, only accessible to pack trains. Canyon City, on a creek of the same name, is nine miles from Junction City and 18 from Weaverville, in a good mining district. The most serious drawback to the county is its long distance from a market. Weaverville is 218 miles north and west from Sacramento. The route is by rail to Redding, and from thence the distance is 180 miles by stage. The mountain wagon roads are usually good. Trinity has considerable good saw timber, and very fair agricultural land open to settlers.

#### TULARE COUNTY.

Lies immediately south of Fresno, and is bounded on the east by Inyo, south by Kern, with its western corner touching on to Monterey county. It has an area of 4,100,000 acres. Tulare belongs to the great San Joaquin valley. The topographical features of the county is made up of mountain,

lake, valley, swamp and overflowed lands. About 2,000,000 acres lying in mountain, the highest peaks of the great Sierra range fringe the eastern border: Mount Whitney, 15,055 feet high; Mount Williamson, nearly the same height; Mount Tyndall, 14,386; Mount Kaweah, 14,000, and others extending fifty in number, of over 13,000 feet above sea-level, are grand sentinels of the Sierras, towering above all other lands in the United States. The scenery among these mountain peaks is of indescribable grandeur. Bright meadows are in the deep valleys once filled by ice in the glacial period, and the gigantic trees, of 115 to 120 feet in circumference, and near 300 feet high, are found on the mountainsides at an elevation of 5,000 to 6,000 feet above the sea. About 1,000,000 acres of the county is broken land, with small, elevated valleys, susceptible of settlement, where the herdsmen keep their flocks of sheep and cattle in summer.

The Visalia land district embraces Fresno, Tulare and Kern counties. These counties comprise a great level valley, with the Sierras on the east, and the Coast Range on the west. They contain more than 500,000 acres of level land, and upwards of 2,500,000 acres of mountain and foothill land. Through the center of these counties runs the Southern Pacific Railroad. The old-numbered sections of land, for twenty miles on each side of the road, belong to the Railroad Company. The even-numbered sections of Government land, within these limits, are held at \$2.50 per acre. The Government lands, outside of these limits, are \$1.25 per acre. None of the Government lands are subject to private entry; they can be obtained only by pre-emption and homestead settlers. There is more or less vacant Government land in almost every township in the district, amounting in the aggregate to many thousand acres. A large portion of these vacant lands are good, and are capable of producing, with proper cultivation, all the products of the soil of the temperate and semi-tropical zones. Much of these vacant lands are as good in quality as private lands in the district now \$25 per acre, but these private lands have been increased in value by cultivation and means of irrigation. Facilities are at hand to make the public lands equally valuable.

This county is well watered by numerous streams, each head in the mountains and empty into Tulare Lake, the San Joaquin, Kaweah and Tulare rivers being the most prominent. Tulare Lake is the largest body of fresh water on the Pacific Coast. It covers an area of about 220,000 acres. It has an overflow outlet into the San Joaquin river, and seems by nature to have been placed as a great reservoir for the storage of water to irrigate the arid west side of this great river. The principal town in the county is

#### Visalia.

The county seat. It has a population of about 2,000, and lies 233 miles southeast from San Francisco, and 8 miles east from the Southern Pacific Railroad, but is connected with great a thoroughfare by a private railroad from Goshen. Visalia is beautifully located on one branch of the Kaweah river, amid groves of evergreen and deciduous oaks, which ornament the country for miles on every side.

#### Hanford.

The second largest town in the county, is situated in the famous "Mussel Slough" country comprising the finest body of agricultural land in the county. Hanford lies 14 miles west of the main line of the S. P. R. R., on the Goshen division of the same company's road. It contains 900 inhabitants, has fine waterworks and extensive grain warehouses. The largest town in the county is

#### Tulare City.

Located on the main line of Southern Pacific Railroad and the terminus of the northern division. Extensive shops for the repairing of locomotives are located here, furnishing employment for a number of mechanics. The town has a population of about 800.

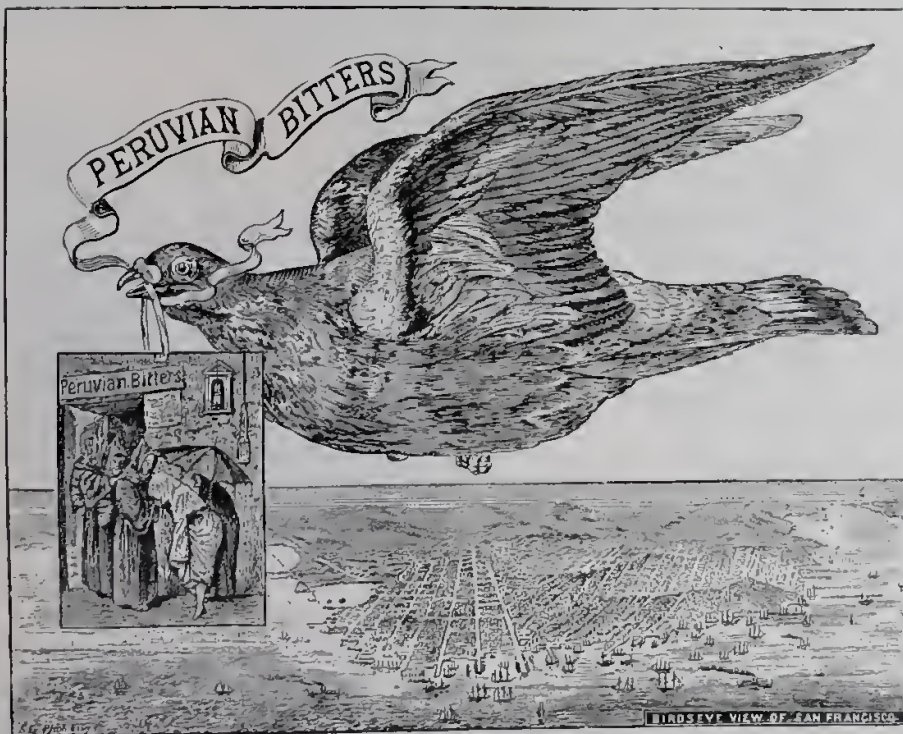
#### Grangeville.

Is located in an excellent grain and fruit-producing country. The land here is all irrigated, and produces huge crops annually. The town contains 150 inhabitants.

The other towns of the county are Lamore, Porterville, Goshen, Farmersville, Woodville, Grandview, Plano and Tipton, the two largest being Lamore and Porterville, which have a population of about 200 each. The capabilities of this county for supporting a large population are remarkable. There are immense forests of timber.

#### TUOLUMNE COUNTY.

In the western slope of the Sierras, nearly due east from San Francisco, is bounded on the north by Alpine, on the east by Mono, on the south by Mariposa, and on the west by Stanislaus and Calaveras. Within the limits of Tuolumne county is a great variety of natural wonders, the greatest of which is the Hatch-Hatcho valley, lying second only to the Yosemite. There are two big tree groves; the larger on the Stanislaus river, in the north-western part of the county, and the other on Tuolumne river, near the southern boundary. The



## PERUVIAN BITTERS.

AS A BEVERAGE, - - - NECTAR! | AS AN APPETIZER, - - - UNEQUALED!  
AS A REMEDY, - - - SOVEREIGN! | AS A WHOLE, - - - UNPARALLELED!

AN UNFAILING CURE FOR ALL MALARIAL DISEASES, DYSPEPSIA AND DEBILITY.



former contains a greater number of the "Sequoia Gigantea" than any on the Coast. These, and the mammoth oaks, lately discovered, entitled Tuolumne to a place first in the list of countries of natural wonders. The reason of their being unknown heretofore, is because of their remoteness from routes of travel, and are so situated that they are not accessible through means of any conveyance, excepting on horseback, over rough mountain trails. But they must be made more accessible for the sight-seers of our wonderful country.

Mines and mining are the principal interests of the county. The Keesler, Riverside, Buchanan, Golden Gate, and Santa Monica are all large mines. A network of quartz veins threads the granite and slate ranges, hundreds of which are yet unprospected. Among those that are being worked, few, if any, are fully developed. There are only ten mills in operation. Some parts of river channels that have been opened have proven extremely rich. Aside from the gold mining, there abound inexhaustible quantities of a very superior quality of marble for monumental and building purposes. Limestone, slate, flagstone, and phosphatic marbles are among the valuable mineral deposits. The whole county is well timbered with forests of valuable yellow and sugar pine, fir, and "Sequoia." There are fully 500,000 acres of good, tillable land, open to settlement.

#### SONOMA.

The county seat, is situated on the left bank of Woods creek, in the south-western portion of the county. It has about 1,400 inhabitants, and is reached from San Francisco by rail (by way of Stockton), to Oakdale, the terminus of the Upper Peninsula road, and from thence by stage a distance of 35 miles; the total distance is 157 miles east of San Francisco. There are a number of good paying quartz mines in operation in this vicinity. Next in size and commercial importance is

#### COLUMBIA.

Four miles north of the county seat, in a rich mining section. It contains 12,500 inhabitants. Chinese camp, eight miles south-east from the county seat, has 400 inhabitants. Some fifteen miles east is Big Oak Flat and Garita district, amid rich and extensive mines.

Fruit-raising, to which the soil is adapted, is one of the growing interests of the county. Semi-tropical fruits and vines are cultivated, and raising grapes do remarkably well in the valleys and lower foothills. The area of the county is 1,250,000 acres. Forty or fifty thousand of these might be cultivated to fruits, vines, and cereals. The population of Tuolumne, in 1880, was 7,848, but would reach about 8,000 at present.

#### VENTURA COUNTY.

Is bounded by Santa Barbara and Kern counties on the north and west, on the Pacific Ocean, on the east by Los Angeles county, and includes the islands of Nicolas and Anacapa. Area 1,286,000 acres. The San Rafael range of mountains from the northern line, the Fernandeño and Santa Susana. The country is well watered.

Principal valleys are Simi, Los Posos Santa Clara, Pleasant, Ohi and Nordhoff. Frost and snow are seldom seen, and little irrigation is required. Los Posos is, perhaps, the best in the county, and its lands are all tillable. Santa Clara has an extreme length of about 50 miles, and measures about 25 in its widest part, and lies along the Santa Clara river. Its lands are good and well watered. Irrigation is but little needed but artesian water can be obtained at less expense here than in any other part of the State. Nordhoff valley is about 22 miles long and 11 in width. Through it, runs the Ventura river, in a winding course, to the sea.

The oil of Ventura has scarcely been touched. The time is not far distant when this will be one of Ventura's greatest revenues.

#### SAN BUENAVENTURA.

The county seat is situated on the sea-shore near the mouth of the Ventura river. The site is admirably adapted, by nature, for the building up of an attractive and imposing city. Looking eastward we could see the broad valley of the Santa Clara, covered with waving green fields, and miles beyond, in the distant horizon, loom up the Catalina-lasca Mountains in a line towards Los Angeles; further to the right Point Magu, its bold bluff jutting to the sea; in the middle distance, to the southwest, is Huachuca Light-house, which is plainly visible by night. Turning north, up the valley of the Ventura river, is a fine wide avenue leading out of town with fine orchards and well cultivated gardens and residences of some of Ventura's wealthiest citizens. On the principal business street may be seen the Old Mission in a good state of preservation. In its archives are three old leather backed manuscripts, recording the fact that San Buenaventura Mission was founded March 31st, 1782.

#### HALE COUNTY.

Lies on the coast twelve miles south-west from San Buenaventura. It is situated on nearly level ground, almost touching the sea. Away to the south-west, twelve miles out at sea lies the island

of Anacapa, a famous resort for the California seafaring; farther west the island of San Nicolas. This is considered one of the finest agricultural sections in the state. Between San Buenaventura and Newhall, in the Santa Clara valley, lies the second largest town in the county, Santa Paula, surrounded by orange orchards and grain fields, the village has 200 inhabitants.

#### NORDHOFF.

A famous resort for pleasure seekers and invalids is reached by daily stage and is located about 12 miles from San Buenaventura in what is known as Ojai valley, it is beautifully situated between the Ventura river on the west and San Antonio creek on the east.

#### SATICOY.

Is a small place, near the renowned Saticoy spring. It is the center of a magnificent agricultural country. Ventura county also boasts of several good mineral springs, which are frequently visited by invalids.

A good quality of natural soap is found here. Large quantities of gypsum have been found in the Ojai valley, and near the beach a very superior quality of potter's clay. Asphaltum is found along all the streams. There are many thousand acres of government land, mainly in the mountains. There are numerous little valleys scattered through the mountains where sheep men keep their flocks.

#### YOLO COUNTY.

Some 80 miles north and east from San Francisco, is one of the finest agricultural sections in all California, the great Sacramento river forming its entire eastern boundary. Salado lies immediately south, and Colusa bounds it on the north, while the summit of the Coast Range of mountains, with Lake and Napa counties on the west, form its western line. This is a prosperous and beautiful county, with an area of 650,000 acres. The larger portion occupies one of the most fertile sections of the Sacramento valley, which extends west from the river a distance of from 20 to 25 miles, reaching to the foothills of the Coast Range. Cache creek, which takes its head in Clear lake, in Lake county, enters Yolo county in the northwest corner, and takes its course in a southerly direction, diagonally through the county; as it enters Yolo it cuts through the Coast Range, forming a rocky canyon for several miles, where the mountains widen out into what is known as Capay valley, a beautiful country, of nearly the size of Napa valley. On either side of Cache creek the soil is excellent for grain or fruit, this stream furnishing the very best facilities for irrigation. The mouth of the valley is some sixteen miles west of Woodland, the county seat. Land is yet quite reasonable in price in this vicinity. The country all along the eastern slope of the Coast Range, known as foothills, has numerous little valleys, which is the choicest fruit land in the State, while the mountain ranges are usually held by possessory title. The population, in 1880 was 11,061, and at present would reach 11,500. Grapes, for raisins and wine, are extensively cultivated. Some of the finest raisins in the San Francisco market come from Yolo county. The shipping facilities of the county are excellent; first, the Sacramento river, along the eastern side of the county, where boats ply up and down.

Railroads run in different directions. The California Pacific extends across the south-eastern portion of the county, with a branch to Davisville, north, to Knight's Landing on the Sacramento; the main line runs north through the county, by way of Woodland, up into Colusa. Along the western portion of the county is the Yuba Valley & Clear Lake railroad, now completed from Elmira, by way of Vacaville and Winters, to Madison, the present terminus. This road will doubtless be extended up Capay valley, with the intention of going up that valley into Lake county. Thus it will be seen that Yuba is very centrally located.

#### WOODLAND.

The county seat, is beautifully situated on a level plain, at the junction of the California Pacific and Knight's Landing branch. The town is regularly laid off, with broad streets, which run at right angles. The place is well supplied with artesian water. The second largest town in the county is

#### WINTERS.

In the south-western portion of the county, where the earliest fruits come from. The land is all fine farming land around here, Winters being just on the edge of the foothills. The town has a population of some 500, supported by agriculture and fruit culture, the products being all shipped to San Francisco, and commands the highest prices, on account of being early in the season.

#### MARYSVILLE.

Is on the line of railroad between San Francisco and Sacramento, and at the junction of the road north. At present the town has a population of 400. Land in this vicinity is the finest kind of sandy loam and sedimentary deposit from Patch creek. Here we see some of the finest orchards in the State.

#### MADISON.

The terminus of the V. V. & C. L. R. R., is located

in a fine, level country, about four miles from the foothills. Marysville is situated in the lower end of the beautiful Capay valley. Knight's Landing is on the Sacramento river, and is the terminus of the road from Woodland.

#### CARLYLE.

Has some 250 inhabitants. There are a number of smaller towns and points in the county, such as Berkeley, Blacks, Cottonwood Canyon, Capay, Charlesburg, Dimigun, Karok, Katerprise, Jefferson, Patch, Pine Grove, Willow Slough, and Yolo.

#### YUBA COUNTY.

In the central part of the north half of California, lies partly in the Sacramento valley, and extends far up in the western slope of the great Sierras. The adjacent counties are Butte, on the north, Sierra and Nevada, on the east, and Placer and Sutter on the south and west. Yuba county has an area of 396,110 acres, and is irregular in shape, being some 50 miles long in a north-easterly to a south-westerly direction, and from 15 to 22 miles in width. The Feather river forms the boundary line on the west, while the Yuba traverses the county from the north-east to the south-west, forming a junction with the Feather at Marysville. The Yuba river was one of the richest in the State, and scores of worked-out mining-bars testify to the prosperity that once reigned there. Extensive hydraulic mining has been done from Timbuctoo to Mooney Flat, where hills several hundred feet in height have been washed away, and the bed-rock laid bare for miles around. Stead Flat, New York Flat, Chappinville, Oak valley, and many other places have been worked on a large scale by this process; so much so, as to change the entire surface of the country, both in the mountain mining region and the rich river bottom lands of the valley.

Yuba county is but partially dependent upon its agricultural resources, and cannot be classed as an agricultural county. Less than one-third of the soil is susceptible of profitable cultivation; the remainder is devoted to grazing, and is rated as timber and mineral lands. The western portion of the county lies in the valley, and is chiefly devoted to wheat, barley, fruit and vegetable farming. Large quantities of potatoes are raised along the Bear river bottom, in the southern portion of the county. The ravages committed on the fertile bottom lands, by the floods washed down from the hydraulic mines, have been great.

Leaves have been very expensive to the citizens of Yuba county. They have been built along the Yuba, Feather and Bear rivers by the county,

besides many private levees, at a total expense of more than \$500,000. There are, at present, four steam saw-mills in the county, which sawed 1,140,000 feet of lumber last year, principally yellow and sugar pine. From the best information we could get, while among the people of Yuba county a short time ago, we estimate the standing saw timber at 12,000,000 feet.

#### MARYSVILLE.

Is situated at the junction of the Yuba and Feather rivers, and has always been the seat of justice of the county. The common sense, substantial brick business blocks, the neat frame buildings, and the beautiful shaded streets all give the city an appearance of having been long established. Few towns in California have suffered more from conflagration and floods than Marysville. It has at present a white population of 5,000.

#### WHEATLAND.

The second town in size, is some twelve miles south from Marysville, on the same line of the railroad. The place is of but recent growth, having been established in 1860, at the completion of the railroad. It is a shipping point for grain, hay, vegetables, potatoes, etc. The town is the center of the finest agricultural portion of the county. Wheatland has a population of 650.

#### CAMPBELL.

Upon the mountains, in the eastern part of the county, is an old mining town, which had its rise with the opening of the mines in 1852. This place has been the scene of large hydraulic operations, described elsewhere. The town still enjoys a fair local trade, and possesses several stores and a good hotel, where all stages stop. The town has a population of about 300.

#### SIERRA CITY.

Is located on the upper Yuba, eighteen miles above Marysville. This has been the scene of the most extensive hydraulic mining in the county but like most mining towns in California, it is on the decline. The other towns in the county are Strawberry Valley, Brownsville, Greenville, Timbuctoo, Sucker Flat, Rose Bar, etc. Yuba county had a population of 11,270 in 1880, and it has about the same at the present writing.

#### A WONDERFUL INCREASE.

The Fireman's Fund Insurance Company Enterprise says: One thousand three hundred bushels of grain were taken from a ranch near Hydenville, this season, in excess of the entire crop last season, and the average was 20 acres less than last season. This shows the general increase in our grain product.

## FIREMAN'S FUND

OF CALIFORNIA.

Capital, - - - - - \$750,000.  
Assets, - - - - - \$1,300,000.



HOME OFFICE:

Southwest Corner of California and Sansome Streets,  
SAN FRANCISCO, CAL.

### The Fireman's Fund Insurance Company

Bases its claims to patronage upon its being the OLDEST PACIFIC COAST FIRE INSURANCE COMPANY; upon ITS RESOURCES, being the LARGEST PACIFIC COAST INSURANCE COMPANY; upon its LOSS-PAYING RECORD, having paid FIVE MILLION DOLLARS for losses during the past Twenty years. And its popularity is attested by the fact that its PREMIUM INCOME is GREATEST OF ALL THE COMPANIES ORGANIZED WEST OF NEW YORK STATE.

D. J. STAPLES, President.  
ALPHEUS BULL, Vice-President.

W. J. DUTTON, Secretary.  
E. W. CARPENTER, Asst. Secretary



**EDGE HILL****VINEYARD, WINE CELLAR AND  
DISTILLERY,**

Near St. Helena, Napa County, California.

SCHEFFLER'S CELEBRATED VACUUM DISTILLED

**SANITARY BRANDY**

-AND-

**Brands of Red and  
White Wines.**STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED**Burgundy, Bordeaux and  
Rhine Wines.****Orders Received and  
Promptly Attended to by****WM. SCHEFFLER,  
PROPRIETOR.****JOS. FREDERICKS & CO.,**

IMPORTERS AND DEALERS IN

**Carpets and Furniture,  
BEDDING AND UPHOLSTERY GOODS,  
RUGS, MATS, LINOLEUM,  
OILCLOTH, LACE CURTAINS,  
CORNICES, WINDOW  
SHADES, DRAPERIES.****649 & 651 Market Street,**

OPPOSITE KEARNY,

**SAN FRANCISCO.****THE CALIFORNIA  
POWDER WORKS.**

**Santa Cruz Gunpowder.**

**HERCULES AND MINING POWDER.**

**SUPERIOR SPORTING POWDER.**



**Pacific Rifle and 1 st. Powder.**

**ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
Kegs.  
SHOT,  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.**

PRINCIPAL OFFICE,

**No. 230 California Street,****SAN FRANCISCO, CAL.****WISE** people are always on the lookout for  
chances to increase their earnings, and in  
time become wealthy; those who do not  
improve their opportunities remain in poverty. We  
offer a chance to make money. We want men, women,  
boys and girls to work for us right in their own local-  
ities. Any one can do the work properly from the first  
start. The business will pay more than ten times ordi-  
nary wages. Expensive outfit furnished free. No one  
who engages fails to make money rapidly. You can dis-  
pose your whole time to the work, or only spare mo-  
ments. Full information and all that is needed sent  
free. Address, **Brimson & Co., Portland, Maine****SULTANA GRAPES.**

A writer in the *Weekly Call* has the follow-  
ing: The coming grape, considering the de-  
mand for cuttings last year, appears to be the  
Sultana, the well-known seedless variety from  
the Levant. From being little known five  
years ago, it has come suddenly into promi-  
nence for raisins and wine, until the plantings  
this season will be limited only by the supply  
of cuttings. It well deserves its general popu-  
larity. It not only makes one of the most  
delicious seedless raisins, but a white wine of  
delicate and superior flavor, besides which, in  
favored localities it has proved itself to be an  
enormous bearer. How it ever got the reputa-  
tion of being a shy bearer is a mystery to those  
who are familiar with its culture in Yolo  
county.

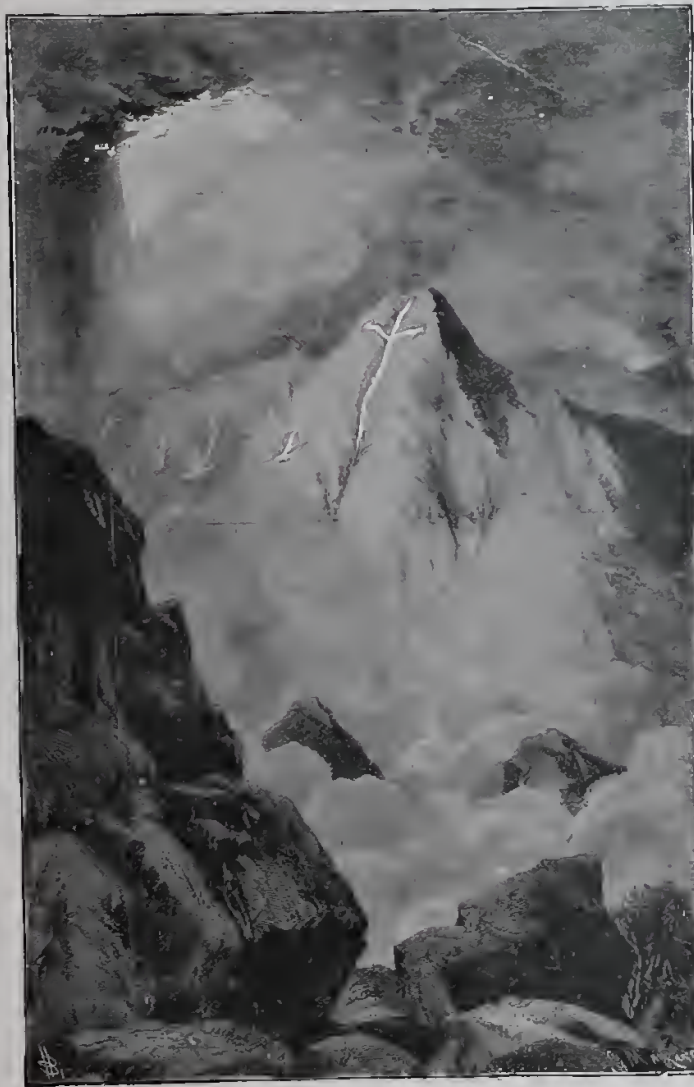
Six years ago R. B. Blowers, the well-known  
raisin-grower of Woodland, planted several  
acres with cuttings of this variety putting them

**CALIFORNIA FLOUR.**

California ships a large quantity of her  
flour to Texas, and Butte county furnishes  
the largest portion of it. The Gridley and  
Oroville mills have shipped thousands of  
sacks. Messrs. Hibbard & Shand, owners of  
the California Steam Flouring Mills in this  
city, will shortly have completed arrangements  
for sending nearly all their flour to Texas.  
That State has formerly received its flour from  
Minnesota, but since the completion of the  
Southern Pacific Railroad, she is drawing  
upon the surplus flour of California, because  
of a better quality than the flour of the North-  
western States.—*Butte Record*.

**THE MUSCAT VINE.**

Four years ago, says the *Riverside Press*, Choffey  
purchased one and two-year-old Muscat vines from  
a neighbor who had lost confidence in the raisin  
grape. He planted 625 and a quarter acres to

**MOUNT OF THE HOLY CROSS, COLORADO.**

in widely apart, or at the rate of 515 to the  
acres. The first crop was produced the third  
year, and the yield was five tons to the acre;  
the second crop was at the rate of ten tons,  
the crop of the fifth year was twelve tons, and  
the past season, the sixth from planting, the  
vines produced the enormous crop of seven-  
teen tons per acre. It is doubtful if this  
yield was ever before equalled in this State  
with any variety. It should be stated that Mr.  
Blower's soil is a rich, strong loam of great  
depth, is copiously irrigated, and receives the  
best culture intelligent management can bestow.  
Owing to the untimely rains, which  
interfered with raisin working, the crop was  
sold to a wine-maker (who found the succe-  
rine strength to be 23 per cent), at \$30 per  
ton, just double the price received for Muscatel  
sold for the same purpose. Mr. Blowers has  
already received orders for 140,000 cuttings, all  
the wood his vineyard has produced. Most of  
them go to the southern part of the State, Los  
Angeles county alone having ordered 100,000.

these vines. The first season after planting he  
plucked the crop, dried the same and sold the raisin  
for \$50; the second season he sold the crop on the  
vines for \$150; the third year he sold his crop in the  
same way for \$200, and this year he has again sold  
his grapes on the vine for \$250. For four years he  
has sold his crops for a total of \$850. The vines  
originally cost him about \$85; he has cultivated  
the same four years, and the little vineyard now  
pays him a net income on a valuation of about  
\$1,800 per acre.

We call special attention to the Llewellyn  
Steam Condenser Co.'s advertisement, else-  
where in this journal, whose filter-heaters and  
condensers are now in successful operation in  
the principal manufacturing establishments  
throughout our city and country. Judging  
from the hundreds of testimonials, stating  
that they save from 25 to 50 per cent. in fuel  
and water, besides keeping the steam boilers  
perfectly clean, without the aid of chemicals,  
this must be one of the greatest inventions of  
the age;

**FIRE AND MARINE****INSURANCE AGENCY**

OF

**HUTCHINSON****& MANN,****Nos. 322 and 324 California Street,  
and 302 and 304 San-  
some Street,****San Francisco.**

Agents for The

**Dwelling House Underwriters, New York,  
\$2,400,744 06.****Girard F. & M. Ins. Co., Philadelphia,  
\$1,101,313 26.****La Confiance Ins. Co., Paris, France,  
\$6,679,565.****New Orleans Ins. Ass'n., New Orleans,  
\$573,216.****Standard Fire Office, London, England,  
\$1,300,000.****St. Paul F. & M. Ins. Co., St. Paul, Minn.,  
\$837,893 43.****The Fire Ins. Ass'n (Limited), London, Eng.,  
\$1,342,673 14.****Teutonia Ins. Co., New Orleans,  
\$401,753 71.****Watertown Ins. Co., Watertown, N. Y.,  
\$1,006,656 23.****MARINE.****The London and Provincial Marine Insur-  
ance Company, London,  
\$6,278,362.****La Fonciere Marine Ins. Co., Paris,  
\$2,250,000.****Capital Represented. \$27,650,527  
SAN FRANCISCO, CALIFORNIA.****W. L. CHALMERS, Z. P. CLARK,  
Special Agents and Adjusters.****F. P. BACON, Pres. C. L. FOUTS, Sec.**

THE

**Globe Iron Works Co.****FOUNDRY,  
MACHINE SHOP,  
and FORGE****Manufacturers and Repairers of all Kinds of  
MACHINERY AND IRON CASTINGS,  
Hoisting and  
Mining Machinery,  
Portable, Stationary and  
Marine Engines.****BISHOP'S ECONOMICAL MINING  
PUMP APPARATUS.****Which does away with Compound Philip  
Rods, V Bolts and 1" Pipes, operating  
equally well in shafts, inclines, consisting  
of sections in distant workings. The  
lens furnished free, upon application.**

AND

**C. H. BAKER'S MINING HORSE-  
POWER  
SPECIALTIES.****ALSO C. D. LOUNTS' PATENT AIR  
COMPRESSORS.****222 and 224 Fremont St.,  
Between Howard and Polson,  
San Francisco.**





## Winter Arrangement.

Commencing Sunday, Oct. 22nd, 1882, and until further notice, Passenger Trains will leave from, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
6:30 A. M.		9:45 A. M.
8:30 A. M.	San Mateo, Redwood, and Menlo Park.	10:42 A. M.
10:10 A. M.		3:37 P. M.
3:30 P. M.		6:34 P. M.
4:50 P. M.		6:32 P. M.
6:30 P. M.		
8:30 A. M.		9:45 A. M.
10:40 A. M.	San Jose and Principal Way Stations.	10:42 A. M.
3:30 P. M.		3:47 P. M.
4:30 P. M.		6:32 P. M.
10:40 A. M.	Delroy, Pajaro, Castroville.	10:42 A. M.
3:30 P. M.		10:32 A. M.
10:10 A. M.	Hollister and Tres Pinos.	6:32 P. M.
10:40 A. M.	Watsonville, Aptos, Soquel, and Santa Cruz.	6:32 P. M.
3:30 P. M.		6:32 P. M.
10:40 A. M.	Salinas, Solimar and Way Stations.	6:32 P. M.

\*Sundays excepted. Sundays only (Sportmen's Train).

Stage connections are made with the 10:40 A. M. Train, except Pescadero Stages via San Mateo, which connect with 8:30 A. M. Train.

### EXCURSION TICKETS

Sold on Saturdays and Sunday mornings—good to return Monday—  
To San Clara or San Jose, \$2.50  
To Monterey or Santa Cruz, 6.00  
Also to principal points between San Francisco and San Jose.

Ticket Offices.—Passenger Depot, Townsend street, and No. 2 New Montgomery street, Palace Hotel.  
A. C. BASSETT, H. R. JUDAH,  
Superintendent, Asst. Pass. & Tkt. Agt.

S. P. Atlantic Express Train via Los Angeles, Yuma, etc., leaves San Francisco daily via Oakland Ferry, foot of Market street, at 9:30 A. M.

## OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY FOR JAPAN and CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 2 P. M.,  
**YOKOHAMA & HONGKONG**

Connecting at Yokohama with Steamers for Shanghai

Will sail from San Francisco 1883.

ARABIC, Thursday, January 18.  
OCEANIC, Tuesday, January 30.  
COPTIC, Saturday, February 10.  
GALIC, Tuesday, March 6.  
BELGIC, Saturday, March 17.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cabin plans on exhibition and passage tickets for sale at C. P. R. Co.'s General Offices, Room 74, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 202 Market street, Union Block.

T. H. GOODMAN,  
Gen'l Passenger Agent.

LELAND STANFORD,  
President.

## COMMERCIAL INSURANCE COMPANY OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, Dec. 31, 1881, \$377,457.82

Losses Paid Since Company was Organized nearly, \$800,000.

JOHN H. WINE, President  
CHAS. A. LATON, Secretary

OFFICE.

No. 405 California Street, S. F.

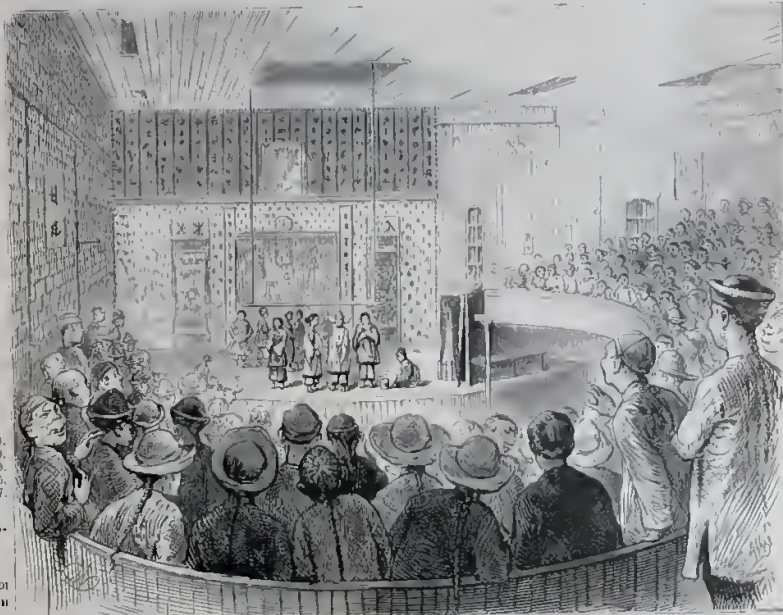
### THE QUAKER DAIRY.

One of the most inviting and attractive dining establishments in San Francisco, is known by the name which heads this article. It is on the first floor of a large, three-story, brick building, located on Sutter street, No. 114. It is most advantageously situated, being close to the Pacific Transfer Company, within a stone's throw of Montgomery street, of easy access to the principal hotels and places of amusement. It is amply supplied with all of the modern appointments usually found in similar establishments in Eastern cities. The room is spacious, affording ample space for the tables and all of the necessary furniture. The table covers are always clean and white as spotless snow. Every dish served is of the very best quality to be found in our markets. The larder is the sweetest and purest that can be procured from the best dairy farms in the State. The colored waiters employed at this place are dressed neatly and tidily, which corresponds with the general attractiveness observable in all of the surroundings of this most inviting dining hall. The Quaker Dairy is owned and conducted by E. R. PERRIN and J. S. DANIELS. These gentlemen have had a large experience, extending over a period of nearly a third of a century, in catering to the tastes of the public, in this line of business. Although this dining-house has only been in operation a short time, it has, already, become widely and favorably known; and we trust that the day is not remote when its reputation will become as world-wide as that of the famous Delmonico in New York City.

The walls of the Quaker Dairy establishment are embellished with engravings, illustrative of rural

### HUTCHINSON & MANN'S UNDERWRITING AGENCY.

It has often been remarked, by those who have given the subject careful attention, that there is no position in the commercial world which requires established integrity, executive ability, and financial skill more than the conduct of an insurance company in the management of its business. The position occupied by our insurance interests, their soundness and strength, are elements of as great importance as similar considerations in regard to our banking institutions. It may safely be said that the owners of property in San Francisco and all of the towns of any importance in the Pacific States and Territories have within their reach the means of insurance against the risk of fire, fully equal in security to those enjoyed by the inhabitants of Europe and the more settled parts of the United States. The most vital points that call for consideration are absolute security, and the certainty of obtaining prompt and fair settlements in the event of disasters occurring, against which precautions are taken. When persons, possessing these facilities, having been tried, by long intercourse with a community, tender their services and the good offices of the companies they represent, they should be rewarded for their fidelity to the great trust reposed in them, by an extended patronage. Without intending to flatter, or even compliment, in the slightest degree, we think that these remarks justly apply to the long established, well-known, and highly-esteemed firm of Hutchinson & Mann. Its advance, during a period of something over twelve years, from a small beginning to a most important business, in point of capital, assets, and reliability, in the insurance world, is a fact that speaks for itself. The combined capital and assets represented by this firm, amount to the enormous sum of \$12,404,732.19, all of which is safely pledged as a safeguard against disasters to which we, in common with all communities, are exposed. An institution having such a vast amount of money at its command, with which to



### INTERIOR OF CHINESE THEATER, SAN FRANCISCO.

and farm scenery, cattle, etc., in place of coarse and indecent dances, too often seen in dining rooms and other public places. This is certainly a feature that adds not a little to the general attractiveness of the place, and will contribute, in no small degree, towards drawing people of taste and culture. There is no bar, where humors, of any kind, are sold, connected with this house. There is one thing that is worthy of special mention. We refer to the milk used at the Quaker Dairy. It is milk in every sense of the word cows' milk, without admixture. The bill of fare discloses the fact that meals can be had at very low prices, considering that every dish is not only carefully prepared, but also of the very best quality which can possibly be procured. For instance, one can get a plate of the very nicest kind of pancakes, with genuine maple syrup and fresh ranch butter, for twenty cents. Everything known in the culinary department, that can be had, is found at this restaurant.

Messrs. Perrin and Daniels deserve credit for having opened this large and every way desirable dining-room in our midst; and we most enthusiastically recommend all visitors to our city who are in the habit of "hanging around" to give the Quaker Dairy a call. Mr. Perrin, without exception, is the best general caterer in San Francisco, and knows how to tickle the palate of the greatest epicure, by his superb cooking.

### LANDS.

The day is not far distant when every acre of arable land in semi-tropical California will be brought under cultivation and occupied by a thrifty and progressive population. Unless some very serious calamity befalls this portion of the State, its taxable property will triple during the next decade.

transact business, offers advantages of the most substantial character, and is a valuable adjunct to the commercial, mercantile, and industrial interests of the Coast. In addition to their fire insurance business, Messrs. Hutchinson & Mann are agents for an English and a French marine insurance company, each of which is of the very highest standing, and offers, in every respect, the fullest guarantee to shippers.

The firm of Hutchinson & Mann, for the prompt and business-like manner in which they always have, and still continue to meet their obligations, and also for the skill and integrity of their able adjusters, has won a most enviable reputation for honor and upright dealing. The house of Hutchinson & Mann is known as one of the most reliable insurance agencies upon the Pacific Coast. Their facilities are practically unlimited, and we congratulate the firm upon their well-earned success.

### CALIFORNIA LUMBER EXCHANGE.

Statement of receipts of lumber at San Francisco during the year 1882

Redwood: rough, 40,604,983 feet; rough clear, 6,661,602; dressed, 38,776,195; half-inch dressed, 17,991; half-inch shingling, 237,856; half-inch battens, 218,880; rough planks, 12,247,811; dressed, 450,108; total, 97,265,434 feet.  
Pine: rough, 117,685,812; dressed, 10,305,408; toning, 7,349,319; planks, 112,497; total, 111,980,608.  
Spruce: rough, 20,110,573; dressed, 762,217; total, 21,472,790 feet.  
Hemlock: rough, 3,364,050; half-inch, 498,634; total number of feet for the year, 201,098,811.  
Sundries: shingling, 132,192,000; laths, 3,684,300; shingles, 10,289,600; white wood, 1,371; piles, (lumber feet), 818,011; redwood posts, 655,885; railroad ties, 116,233,057; trestle lumber, 909,308; wood shingles, 270,230; Spanish cedar logs, 3,094; spars, (lumber feet), 62,332; poles, (lumber feet), 48,385.

A. THAYER, Secretary.

Subscribe for the RESOURCES OF CALIFORNIA.



## QUICK TIME AND CHEAP FARES

FROM

AUSTRALASIA, CHINA & JAPAN,

TO

NEW YORK

AND

LIVERPOOL

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

CENTRAL PACIFIC RAILROAD

CONNECTING WITH

Union Pacific Railway

AT OGDEN, UTAH,

AND

SOUTHERN PACIFIC RAILROAD

CONNECTING WITH

Atchison, Topeka and Santa Fe Railroad,

AT DEMING, NEW MEXICO,

AND THE

Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railroad Lines in the Eastern States, for all the Cities of

UNITED STATES AND CANADA.

CONNECTING AT

NEW YORK

With the several Steamer Lines to

England, France,

AND ALL EUROPEAN PORTS.

Silver Palace Sleeping Coaches,

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and sleeping cars by night, are unequalled for comfort and convenience to the passenger, and also—constituting the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable couches, clean bedding, and a competent Porter accompanying each Car, to attend to the wants of our Patrons.

Children under Twelve years of age, Half Fare. Under Five years of age, Free.  
100 pounds of Baggage per full Passenger.  
50 pounds of Baggage per half Passenger.  
Freight, Free.

PRINCIPAL TICKET OFFICE

AT THE

OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

Where passengers, calling en person, can secure choice of routes and sleeping-car accommodations.

A. N. TOWNE,

Union Pacific Agent.

T. H. GOODMAN,

Gen. Pass. & Ticket Agent.

SAN FRANCISCO, CAL.



# STOVES

For Cooking, Parlors, Offices, Halls, Bed-Rooms, Churches, Stores, Etc.

THE LARGEST STOCK AND GREATEST VARIETY  
WEST OF THE ROCKY MOUNTAINS.

Over 500 Different Sizes, Styles and Patterns to Select from.

TIN PLATES  
SHEET IRON  
PUMPS  
IRON PIPE  
BRASS GOODS

MANUFACTURERS OF

PLAIN, JAPANNED AND STAMPED

## TINWARE

### W. W. MONTAGUE & CO.

110, 112, 114, 116 and 118 Battery St.

**WATER JACKET  
SMELTING  
FURNACES**

FOR

**GALENA-SILVER  
and COPPER ORES.**

THE PACIFIC WATER JACKET SMELTERS embrace many features that are entirely new and of great practical utility, which are covered by letters patent.

No other furnaces can compare with these for durability and in capacity for uninterrupted work.

**MORE THAN SIXTY OF THEM ARE NOW  
RUNNING ON THE PACIFIC COAST.**

Giving results never before obtained in regards continuous running, economy of fuel, grade and quality of bullion produced. We are prepared to demonstrate by facts the claims here made.

**THESE SMELTERS ARE SHIPPED IN A  
COMPLETE STATE.**

Requiring no brick or stone work, except that for the crucible, thus saving great expense and loss of time in construction.

**COMPLETE SMELTING PLANTS MADE  
TO ORDER.**

Of any capacity, and with all the improvements that experience has suggested as valuable in this class of machinery.

**SKILLED AND EXPERIENCED SMELT-  
ERS FURNISHED.**

When desired, to examine plans and to see pertinent construction and running of furnaces. Estimates given upon application. Send for Circular.

**RANKIN, BRAYTON & CO.**

Pacific Iron Works, San Francisco.

**JOHN MIDDLETON,  
COAL DEALER,**

10 POST STREET,

715 SANSOME STREET.

Coal at Lowest Market Rates.

**J. M. LITCHFIELD & CO.,**

Manufacturers of and Dealers in

**MILITARY GOODS,**

**SOCIETY REGALIA,**

**Lodge Supplies, Flags,  
Banners, Etc.**

415 MONTGOMERY ST.,

SAN FRANCISCO.

**THE NEVADA BANK**

— OF —

**SAN FRANCISCO.**

Paid Up Capital ----- \$3,000,000  
Reserve (U. S. Bonds) ----- 3,500,000

Agency at New York, ..... 62 Wall Street  
Agency at Virginia, Nevada.

**ISSUES COMMERCIAL AND TRAVELERS'  
Credits.**  
Buys and sells Exchange and Telegraphic Transfers

This Bank has Special Facilities for Deal-  
ing in Bullion.

SAN FRANCISCO, California.

#### SAN MATEO'S PROSPECTS.

There is no county in the State of California, considering its area, that contains the excellent advantages that does this little peninsular county of San Mateo. When we say advantages, we mean to embrace therein its splendid climate, its fertile soil, and above all its many charming spots for suburban homes. For the reason that San Mateo county adjoins San Francisco, and for many years the two were one, the idea has gone abroad that on account of our nearness to the great metropolis, that we cannot be prosperous; that we are nothing but a little insignificant side-show to San Francisco. There are but comparatively few outside of this county that understand and appreciate the great and extensive resources that are constantly nurtured and propagated in our midst. During the last few years it has become understood that no finer soil can be found in the State for vine-growing than lies

#### A RUSSIAN RIVER FARM.

The following, taken from the Russian river *Flag*, shows what average farm-lands will produce in California: A five-acre apple orchard, twenty years old, at John N. Bailhache's ranch, southeast of town, yielded this year \$1,000 worth of shipping fruit, ordinary varieties. Mr. Bailhache has an elegant home place. The residence is, no doubt, the finest in northern Sonoma, built on the bank of Russian river, near the base of Mount Sotoyome, at the site of the first houses constructed in the valley by the founder of the Sotoyome grant in 1844. The adobe walls of the original building are still part of the new residence built by Mr. Bailhache a few years ago. The ranch consists of about 500 acres, of which five, as we have stated above, are occupied by a three-year-old apple orchard; five more by a large crop of corn and beans from between the rows; fifteen are in alfalfa, one of the best-paying crops in the valley; sixty-five are in foreign vines, two years old next spring, and which will yield, when five years old, at present prices, fully \$150 per acre, and more as they grow older; and from which he has reaped large crops of corn and beans from between the rows. There is some hay land and 400 acres of pasture, on which roam 300 head of graded sheep, besides sundry head of horses and cows. The sheep never require feeding and pay about two dollars net per head per annum. Nearly all the work of this place last year was done by Mr. Bailhache and three of his sons.

#### VITALITY OF THE ORANGE.

From the Los Angeles *Times* of recent date we take the following:

The orange tree one would naturally infer to be very tender and requiring very careful treatment and handling. The fact is, however, that it is one of the most hardy of trees, and will often live through the most trying ordeals and survive the most careless handling, to which almost any other tree would succumb. Dr. A. F. White's fine orchard, on Main street, affords two striking instances of its surviving hard treatment; of the careless treatment you will have to go further to learn, for you can find no instance of it there. One of his trees, some two years ago, was stripped of its bark, just under the surface of the ground, for several inches around the entire circumference of the tree, leaving not a shred remaining. The damage could not be seen from the surface, and it was not discovered until the tree showed signs of disease. Investigating for a cause, the wound was discovered. It was bound up and the top pruned back so as not to strain its energies, and now that tree has a good crop of oranges, almost as fine as can be found in the orchard. Another case of hardihood in the same orchard is where a mischievous boy, some four or five years ago, perhaps more, as it was long before the doctor came into possession of the property, completely girdled a limb of an orange tree with a new knife he was testing. The limb still lives, and is now full of oranges, and has borne every year since it was girdled, though the wound has not healed, and a space of two inches of that limb is apparently dead as it ever can be; and not only that, but it is cracked almost entirely through at the same place, caused by the weight of the fruit it has borne.

#### BIG TREES.

on the eastern slopes of the mountain range that borders this valley on the west. S. L. Jones of San Francisco, has been far-seeing enough to understand the practicality of cultivating a vineyard in that locality, and has spared no expense in establishing one of the finest vineyards, of its size, in the State. His efforts in this direction have been rewarded by unbounded success. Why should not this venture be succeeded by many others of the same nature. There is no scarcity of land equally as fertile, and as conveniently situated as that owned by Mr. Jones.

There is no question but that in the near future the cultivation of the vine in California will lead all other industries, and it will not be long ere the wines and brandies manufactured in California will be first in the markets of the world. San Mateo county, though small, is destined to receive her share of the wealth that is sure to be derived from this source. — *San Mateo Times and Gazette.*

#### CHOICE!

**THE ARCTIC**

Refrigerator, Sugar-Cured

**HAM!**

**EQUAL TO ANY IN THE COUNTRY.**  
Every Ham Branded and Guaranteed.  
We specially invite the attention of the City Trade to one UNCOVERED Ham of the above brand, unequalled in cure on this Coast, and comparing favorably with the best brands in any market—combining excellence and economy.

**MERRY, FAULL & CO.,**  
Provision Packers, and Dealers in Meat  
Products of all Descriptions,

125 California Street.







J. P. SHEFFIELD. J. PATTERSON. N. W. SPATLING.



17 and 19 Fremont street,  
SAN FRANCISCO.

AGENTS FOR C. B. PAUL'S  
CELEBRATED FILES,  
Planing Knives, Currier Knives, Saw  
Mandrels, and Saws of Every  
Description Made to Order.

**THOS. PRICE'S  
ASSAY OFFICE**  
AND CHEMICAL LABORATORY,

524 Sacramento Street, San Francisco.

DEPOSITS OF BULLION RECEIVED, MELTED  
into bars, and returned made in from twenty-four  
to forty-eight hours.  
Bullion can be forwarded to this office from any part  
of the interior by express, and returned made in the  
same manner.

Careful Analyses made of ores, metals, soils, waters,  
industrial products, etc. Mines examined and reported  
upon. Consultations on chemical and metallurgical  
questions.

J. F. FARNWORTH. M. T. BREWER  
**M. T. BREWER & CO.,**  
Nos. 30 and 32 J Street,  
SACRAMENTO, - - CALIFORNIA

COMMISSION MERCHANTS & WHOLE-  
sale dealers in Foreign and Domestic Green  
and Dried Fruits, Produce, Honey, Nuts, Garden  
and Flower Seeds. Please give us a trial. 30 and 32  
J Street, Sacramento Cal.



San Francisco, - - California.

ON THE EUROPEAN PLAN.

ELEGANTLY FURNISHED ROOMS.  
FIRST-CLASS RESTAURANT.  
The Handsomest Dining-room in the World.  
WM. F. HARRISON, Manager.

**HOME MUTUAL  
INSURANCE COMPANY**  
(OF CALIFORNIA.)  
Organized 1864.

JANUARY.....1882.

**FIRE ONLY**  
PRINCIPAL OFFICE:  
No. 406 California Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00  
Premiums, since organization, \$3,841,412 07  
Losses, since organization, - - \$1,756,278 00  
Assets, Jan. 1, 1882, - - - \$684,332 83  
Surplus for Policy Holders, - - 674,577 83  
Income, 1881, - - - 330,940 90  
Reinsurance Reserve, - - - 171,412 75  
Net Surplus Over Everything, - 203,165 08

OFFICERS:

J. F. HOUGHTON.....President  
J. L. N. SHEPARD.....Vice President  
CHAS. R. STORY.....Secretary  
R. H. MACFARLANE.....General Agent.

**REST** Not, life is sweeping by, go and dare be-  
fore you die, something mighty and sub-  
lime leave behind to conquer time " \$50  
a week in your own town. \$5 outfit free. No risk.  
Everything now. Capital not required. We will fur-  
nish you everything. Many are making fortunes. La-  
dies make as much as men, and boys and girls make  
great pay. Reader, if you want business at which you  
can make great pay all the time, write for particulars to  
H. Hallett & Co., Portland, Maine.



OPPOSITE UNION SQUARE

THE LEADING

**Commercial School**  
ON THE COAST.

**LIFE SCHOLARSHIPS**

-FOR-

Business Course. Only \$70.

**NO VACATIONS.**

Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Beautiful Location.  
Ladies Admitted.

Special Inducements Offered to Per-  
sons of Neglected Education.

Business Course.  
Academic Course.  
Combined Course.  
Penmanship Course.  
Modern Languages.  
Photographic Course.  
Special Branches.

For Further Information call at the  
College Office.

**No. 320 POST ST.,**

Or Address the Proprietors,

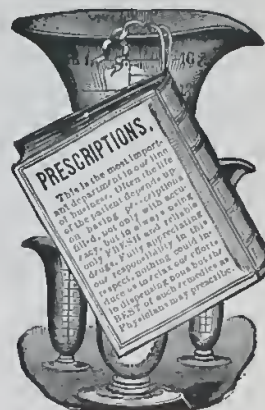
**CHAMBERLAIN & ROBINSON.**

**\$72** A work made at home by the industrious.  
Best business now before the public. Capital  
not needed. We will start you. Men, women,  
boys and girls wanted everywhere to work for us. Now  
is the time. You can work in spare time, or give your  
whole time to the business. No other business will pay  
you nearly as well. No one can fail to make enormous  
pay, by engaging at once. Costly on all and terms free.  
Money made fast, easily and honorably. Address,  
Thos. & Co., Augusta, Maine.

**JAMES G. STEELE & CO.,**  
Druggists and Manufac-  
turing Chemists,

RESPECTFULLY CALL ATTENTION TO  
THEIR NEW ARRIVALS OF

Foreign Perfumery, Colognes, Scented  
Toilet Soaps, Hair, Tooth and Nail  
Brushes, Combs, Hair Oils, Pomades, Face  
Powders and Cosmetics, Sponges,  
Patent Medicines, Etc., Etc.



JAMES G. STEELE & CO.'S

**Palace Drug Store,**  
PALACE HOTEL.

635 Market Street, - - SAN FRANCISCO.

**W. T. GARRATT'S  
BRASS AND BELL FOUNDRY,**  
SAN FRANCISCO.

MANUFACTURER AND IMPORTER OF

Church and Steamboat BELLS and CONGS

BRASS CASTINGS of all kinds,  
WATER GATES, GAS GATES,  
FIRE HYDRANTS,  
DICK HYDRANTS,  
GARDEN HYDRANTS.

A GENERAL ASSORTMENT OF ENGINEERS' FINDINGS

Bunker's Patent  
CELEBRATED

**STEAM PUMP**

"The best and most  
durable in use. Also  
a variety of other

**PUMPS**  
For MINING and  
FARMING purposes.

Root's Blast Blowers,  
For Ventilating Mines and for Smelting Works.

HYDRAULIC PIPES and NOZZLES,  
For Mining Purposes.

GARRATT'S IMPROVED JOURNAL METAL

IMPORTER OF

IRON PIPE and MALLEABLE IRON FITTINGS

ALL KINDS OF

SHIP WORK & COMPOSITION NAILS

AT LOWEST RATES

**The California Lloyds**

**UNION**

**INSURANCE COMPANY**

OF CALIFORNIA.

THE CALIFORNIA LLOYDS

(Established 1851.)

**FIRE AND MARINE**

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 426 and 418 California St.

Agencies in all the Principal Cities of the

United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary.

O. P. FARNFIELD, General Agent.

GEORGE T. BOHEN, Surveyor.



MANUFACTURERS OF

**PIONEER WHITE LEAD,**

SOLE AGENTS FOR

FRENCH AND BELGIAN

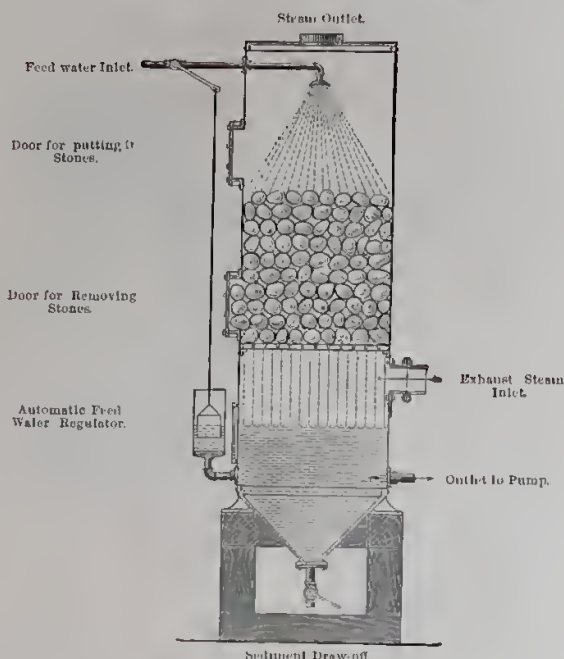
**PLATE GLASS COMPANIES.**



**LLEWELLYN FILTER-HEATER,**

Patent Issued Aug. 12, 1879, Re-issued Aug. 16, 1881.

For the Prevention and Removal of  
**STEAM BOILER INCRUSTATIONS**  
 WITHOUT THE AID OF CHEMICALS.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 50 to 50 per cent of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.  
 Further particulars with full descriptive circular and price list can be obtained at the office of the

**LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,**

330 PINE STREET, ROOM 7,

**SAN FRANCISCO, - - - CALIFORNIA.**

Descriptive Catalogue Sent on Application.

Manufactory, Columbia Foundry, 1331 and 1335 Beale Street.

WM. B. ISAACS.

J. D. CULP.

S. E. THORNTON.

**J. D. CULP & CO.,****MANUFACTURERS OF HAVANA CIGARS,**

And Importers of

**LEAF TOBACCO.**No. 16 Front Street, - - - **SAN FRANCISCO.**

The "GIRLS"  
 are a Four and  
 Three-quarter  
 Inch Cigar.  
 Made from Pure  
 Tobacco.

NO DRUGS.

NO ARTIFICIAL  
 FLAVOR.

TRY THEM.



Manufactured by

**J. D. CULP & CO.,**No. 16 Front Street, - - - **SAN FRANCISCO.**

Send for a  
 Sample Or-  
 der, and  
 Give our

"GIRLS"  
 a Trial.

YOU WILL  
 WANT MORE.

**THE LION**  
**FIRE INSURANCE COMPANY**

OF LONDON, ENGLAND.

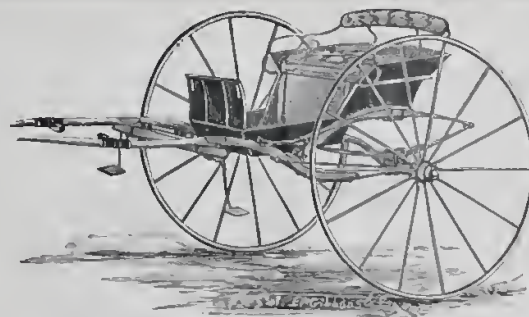
**CAPITAL, - - - \$5,000,000**

ASSETS HELD IN THE UNITED STATES OVER \$750,000.

**PACIFIC BRANCH:****433 California Street, San Francisco, Cal.**

**GEO. D. DORNIN,**  
 Manager.

**WM. SEXTON,**  
 Asst. Manager.



**HORTOP'S EUREKA CART.**  
 Six Different Styles. The Best Style Cart now in use. Easy Riding, Simple and very  
 Neat. With Pole, Shaft or Canopy Top. Manufactured by the  
**RUTHERFORD AGRICULTURAL WORKS,**  
 RUTHERFORD, NAPA COUNTY, CALIFORNIA.  
 Price from \$60 to \$150. **HENRY HORTOP, Patentee.**



**B. FRIEDLANDER,**  
 The Leading Merchant Tailor  
 OF SAN FRANCISCO.

STORE AND MANUFACTORY:  
 NO. 761 MARKET STREET,

Awarded the First Premium  
 -AT THE-  
 MECHANICS' FAIR IN 1882  
 At Portland, Oregon.

A FULL LINE OF  
 French, German and English Cloths  
**ALWAYS ON HAND.**

Samples with Self-measurement Sent Free.  
**PERFECT FIT GUARANTEED.**

**RUBBER HOSE.****GARDEN HOSE.**

OF ALL GRADES AND SIZES  
 The Very Cheapest and Very Best  
 The Celebrated

**Maltese Cross Hose,**

For Garden Purposes and Fire Departments

MANUFACTURED AND FOR SALE BY THE  
 Gutta Percha and Rubber Manfg Co  
**JOHN W. TAYLOR, Manager.**  
 Cor. First and Market Sts., San Francisco

**TABER, HARKER & CO.**

IMPORTERS AND

**WHOLESALE GROCERS**

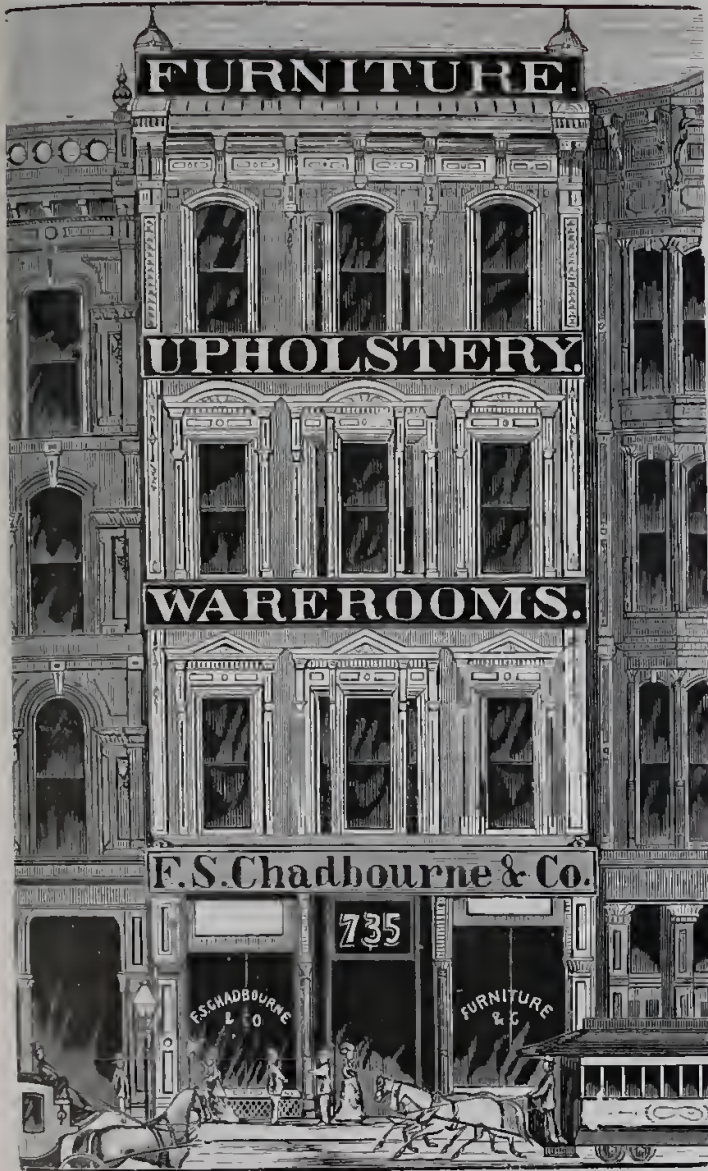
108 &amp; 110 California St.

**SAN FRANCISCO.**



F. S. CHADBOURNE &amp; CO.,

735 MARKET STREET, - - SAN FRANCISCO, CAL.



IMPORTERS, MANUFACTURERS,

AND—

Wholesale and Retail Dealers in  
**FURNITURE AND BEDDING**  
**OF EVERY DESCRIPTION.**

Chamber, Parlor, Library and Dining  
 Suits,

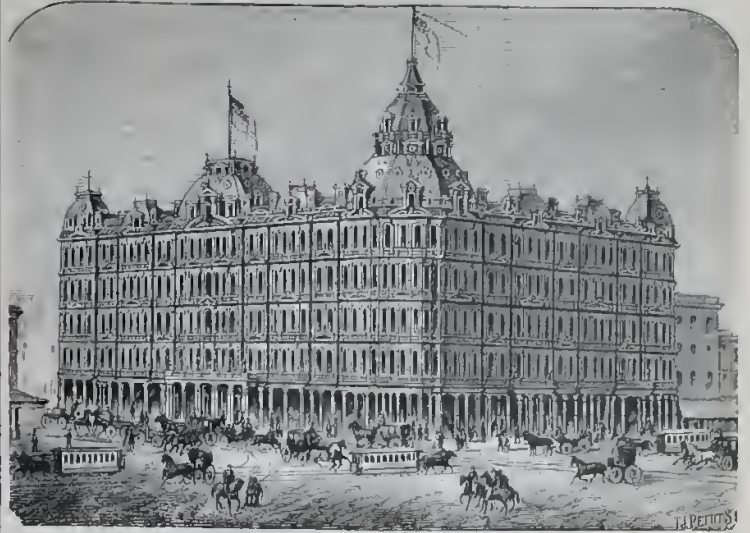
IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish  
 Easy and Lounging Chairs, Etc.—Hotels and Private  
 Residences Furnished.—Designs Furnished  
 and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

735 Market Street, - - San Francisco.

WILL REMOVE TO 741, 743, 745 MARKET ST.,  
 CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

**THE BALDWIN!****THE BALDWIN!**

**THE LEADING HOTEL**  
**OF SAN FRANCISCO, CALIFORNIA.**

This Hotel was Completed and Opened in May, 1878, and is Conducted on the American Plan. Over \$3,500,000 having been expended by Mr. BALDWIN in its Construction and Furnishing, THE BALDWIN is the most Elegantly Appointed Hotel in the World. Situated on Market Street, at the intersection of Powell and Eddy Streets, and fronting four principal streets in the business center, it is convenient of access to and from all quarters of the City. Eight lines of Street Cars pass its doors. Hotel Coaches and Carriages in waiting at all Steamers and Railway Depots, Tourists' Headquarters. Special Accommodations for Families and Large Parties.

Prices the Same as at other First-Class Hotels,  
**\$2.50 to \$5.00 per Day.**

H. H. PEARSON, Proprietor,

Formerly proprietor of the COSMOPOLITAN, San Francisco

BRUSH HARDENBERGH,  
Chief ClerkM. A. FRENCH,  
Cashier.

**PACIFIC COAST LAND BUREAU.**  
**A CORPORATION.**

President, - - - WENDELL EASTON,  
 Vice-Pres. and Gen. Manager, - - - GEO. W. FRINK,  
 Treasurer, - - - ANGLO CALIFORNIAN BANK,  
 Secretary, - - - F. B. WILDE.

BOARD OF DIRECTORS:

J. O. ELORIOGE, G. W. FRINK, GRANT I. TAGGART, F. B. WILDE, WENDELL EASTON,

PRINCIPAL PLACE OF BUSINESS:

**NO. 22 MONTGOMERY STREET.**  
**San Francisco, California.**

Sub Agencies at Each County Seat of the State,

-ALSO-

NEW YORK, NEW ORLEANS AND LONDON.

**General Agents for Sale of Lands of Central  
 and Southern Pacific Railroads.**

AGENCY FOR SALE AND EXCHANGE OF FARMING LANDS.

Large Tracts Subdivided and Sold at Auction or Private Sale.

Colonists and Immigrants Licensed—Careful Appraisements made for Banks, Courts, Ad-  
 ministrators, Trustees, etc.—Legal Forms compiled with—Full Records of sales  
 in each county on file at the General Office—Assume entire charge  
 of Property, pay Taxes, Insurances, etc., etc.



## ALASKA TERRITORY.

**Location—Area—Immense Mineral Resources—Volcanic Mountains—Forests of Timber—Climate.**

**Rivers—Fur—Seal, Salmon, Halibut, Herring, and Cod Fisheries.**

**Inhabitants of Our North-western Country, Etc., Etc.**

[By the Traveling Agent of THE RESOURCES.]

It has been our mission, so far, to give true and faithful descriptions of California only, but as we are publishing an extra large edition of our Annual, we will step out of our ordinary course and give our readers a glimpse of the extreme north-western portion of North America, viz., Alaska, which, until the last few years, has attracted but little attention from the public at large, and, indeed, the average citizen of this new Territory acquired by our government from the Russians, during the close of the year 1867, in consideration of the cash payment of \$7,250,000.

This purchase has proved a good investment for the United States Government. It has received from the Alaska Commercial Company, alone, since August, 1870, as taxes, \$3,819,143.24, or nearly one-half the cost of the purchase of the entire Territory. The franchise has eight years yet to run. This company, by the time its lease expires, will have paid, in taxes, more than the original cost of the purchase by the Government. We think it would be well for our Government to make a few more like investments.

Instead of examining closely into the natural resources of this vast territory, embracing some 500,000 square miles of land, we have been inclined to judge too harshly of it, without giving an impartial examination of its great wealth.

Alaska, instead of being a barren waste, as has been so often told us by political speakers, who condemn our government for the reckless expenditure of such a sum in her purchase, is, on the other hand, one of our most important acquisitions of new territory. By this acquisition, we extend our possessions to the far-off region of the northwest, and the Esquimaux, in his native home, adds to the population of our country. Now, that fifteen years have quietly passed since this purchase was made, and to-day everything is at peace and harmony with our new relations, let us turn over a page for a moment, and see what the future prospects are for the pioneer who seeks to open up new fields for the thrift and energy of the American in this comparatively new world. Here, we have an

### Immense Northern Possession

Of more than 220,000,000 acres of land, a territory equal in size to Colorado, Nevada, New Mexico, Arizona and California combined. When we come to contemplate the magnitude of such a vast northern possession, it is but natural that our eyes should be turned to investigating its resources and future prospects, from a commercial point of view. Alaska extends over 1,400 miles along the coast. It includes a large portion of the Aleutian islands, a range of islands skirting the peninsula and the main land southward to latitude 50 degs. 40 min., and it is more than 1,000 miles north from San Francisco, by sea.

### Surface of the Country.

The eastern portion of the mainland is a sterile plain, rising along the Arctic coast into a table-land. The Alaskan range of mountains extends through the peninsula, and the Coast Range forms a portion of the eastern boundary of its territory. The waters of the Pacific wash its southern shores, the Arctic ocean bounds it on the north, while Behring's straits separates it from Asia on the west. Alaska has many volcanoes, ten of which are known to be active. Mount St. Elias, the tallest peak on the American continent, is about 18,000 feet above the sea-level.

### Climate.

Alaska has a much warmer climate than other regions in the same latitude on the eastern coast of our continent. The climate is not unlike that of Michigan or Maine in winter, and probably not as cold as Minnesota or Montana. Generally speaking the snow falls from two to three feet on the level. The ice breaks up in the rivers and bays in the latter part of April. From May to October the weather is warm and pleasant. Last year the first frost was seen on September 15th. The mildness of the climate, in this high latitude, is attributed to the warm ocean current flowing north along the eastern coast of Asia, through Behring's strait, to the Arctic ocean.

That Alaska has unlimited resources now await-

ing development, there can be no doubt, and it depends upon the man of pluck and American push and energy to develop this country. The energetic Californian miner has already opened his eyes to the mining interests, which have every indication of being successfully carried on in this new field of hidden treasure. Aside from the vast mineral resources of gold, silver, iron, copper, lead, antimony, bar, (which have already been discovered, and are known to exist in large quantities), Alaska presents other fields of equal, if not greater importance, for development. The most important of these is the trade in fur-seal. The animals are found only in Behring sea, on the Pribiloff group, composed of the two small islands of St. George and St. Paul, which are leased by the United States Government to the

### Alaska Commercial Company,

whose headquarters are at No. 310 Sansome street, San Francisco. The lease is under certain conditions, which limit the taking of the fur-seal to 100,000 a year, and is a source of considerable revenue to our Government. Under this restriction, the young females, under a certain age, are not allowed to be taken. The seal is increasing

months, in all of the creeks, rivers, and inlets. These fish are so plentiful, at times, that the streams scarcely afford sufficient passage for them to pass up in the spawning season. This is the harvest season for the native, who catch them in large quantities, with a scum net, from the shore, or by the aid of a leard with nails driven in the end, with which they take them out. These fish are split and dried in the sun, by the natives, for winter subsistence. There are three different species of the salmon in the waters of Alaska. The average fish will weigh from 10 to 50 pounds. The larger, commonly called the Imperial salmon, grow to immense proportions. It has been authoritatively stated that they have been caught weighing as much as 200 pounds.

Codfish, in large quantities, are found in all parts of the Territory along the sea coast, but more especially along the coast of the Alaska peninsula, where they may be caught with hook and line in 20 to 50 fathoms of water. This fish is so abundant that it is an easy matter to catch several hundred an hour. Halibut are also found along the coast of the Alaska peninsula, but they are more numerous in the deeper waters around the Shumagin islands to the westward of Kodiak.

were brought to this city by the discoverers, and upon being assayed, gave such satisfactory results as to lead to the organization of an expedition, which sailed from San Francisco last spring, in pursuit of this treasure. The expedition was a success, so far as the finding of the silver was concerned, but the vessel was wrecked, with her cargo of ore. These mines are situated in the northern part of Alaska, about 30 miles from the coast of Galatin bay, on the north side of North Sound. They are truly crisp out in a depression in a range of mountains, the highest of which is 2,600 feet above the level of the sea, and is called, by the Esquimaux, "Omliak."

One from this locality, which is argentiferous galena, has been assayed, by our well-known, reliable assayer, Thomas Price, and the result was \$121.25 silver and 83 per cent. lead. Ore from the same locality, which was assayed by the Selby Smelting Works, gave \$113.51 silver, and 80 per cent. lead. This would yield over \$200 per ton. The cost of smelting is not expensive, on account of the high percentage of lead, which makes the reduction quite easy.

### Timber.

There are extensive forests of pine, cedar, spruce, and other timber, which are bound to become valuable in time.

### Sitka

The capital of the Territory, is situated on the west coast of Baranoff island, one of the largest and most westward of the Alaskan archipelago. The population of Sitka at one time, during the Russian rule, was upwards of 4,000. From six to eight ships were always in the harbor, and shipping was carried on quite extensively. The present population consists of about 300 Russians, less than 50 Americans, and about 1,000 Indians. There is no telegraphic communication with the outside world, the signal station here merely serves to establish the average temperature and rainfall. There are five of these stations in Alaska. The reports are forwarded to Washington, from Sitka, every month. Observations made here from July, 1881, to July, 1882, show the maximum temperature to have been 79 degs. above zero, minimum temperature 4 degs. below zero; rainfall, 88 inches; average temperature for the entire year, 44 degs.

### HOW TO MAKE MONEY IN BUSINESS.

The merchants of this city are not all of them as sharp in business matters as they might be. A good many hold on to the old '49 idea of business, when immense profits were made. This is the era of cutting close and the man who does not cut profits close will find himself left behind, while his shrewd competitors are taking away trade on all sides. A very apt illustration of the difference in the two modes of doing business was afforded us the other day. One of the oldest houses in the city had a special department, in which they sold comparatively few goods. A new man came in to take charge of the department, and, resuming the situation at a glance, advocated the cutting down of profits. "Let us," said he, "make our margin of profit at ten per cent. where it has previously been fifteen." The principal thought that would not do for the Pacific Coast, although it might answer in the East. The young man was, however, so persistent that he was allowed to try it by way of experiment, with an intimation that he would soon see the error of his ways. The young man took hold, the reduction of \$5 on every \$100 bill of goods attracted customers, and the most desirable class, those who had money, or whose word was as good as their money. The experiment did not prove a failure. Not a year had elapsed before where one article had been sold under the old regime, six were sold under the new, and now the whole \$60 were made, where previously not more than \$15 could be counted on. And so it is in all kinds of business. Close cutting must be the order of the day in order to extend and to keep our trade. A profit of eight per cent. is sometimes more than equal to one of twenty. For example, let a man with \$100 turn it over once in the course of the year, so that it makes, at twenty per cent., just twenty dollars. But another takes eight per cent. and turns out his capital once a month, he makes twelve times \$8, or \$96 for the year, against the other's \$20, or more than four times as much.—*E. Journal of Commerce.*

### THUNDERBOLT COAL AND COAL OIL.

The *San Francisco Standard* says: Humboldt county offers a most inviting field for investigation both for coal and coal oil. Her coal fields and coal reservoirs are wholly untouched. We make the unqualified assertion that California has no more promising coal and coal oil field than Humboldt county possesses, and for the operator who takes hold of the latter, there will be a rich harvest.



SCENE ON THE AMERICAN RIVER, CALIFORNIA.

rapidly in numbers, year by year, and is not exterminated, as has been the case on the South American coast, where any and all persons have been permitted to take seals without restriction. Alaska is to-day furnishing three-fourths of the fur-seal of the whole world.

Next in importance is the valuable fur of the sea-otter, which is found chiefly in the southern portion of the territory, along the shores of the Alaska peninsula, from Cook's inlet to the westward, as far as the small island of Atton, near the Asiatic coast. This ranks among the most valuable furs in the market.

On the land we find, in great abundance, the otter, mink, wolverine, mule, muskrat, and also the moose, reindeer, elk, bear, wolf, etc., all of which are trapped and their skins, hides, and pelts are sold by the natives to the numerous trading vessels visiting this section yearly, in pursuit of trade. Last, but by no means least, come the

### Immense Fisheries of Alaska,

which are simply inexhaustible. Every stream and brook, in its season, may be found literally alive with the many tribes, principally salmon, which are the finest species in the known world, and are much superior to those found in the waters of the Columbia, Col., or Sacramento rivers. They are found in large quantities, during the summer

The herring of Alaska are equal to any, if not superior to the Dutch herring or Pomorie river herring, and are found to the westward of Unimak Pass of the Alaska peninsula and around the coast of the islands of Omliaska, Akutan and the lesser islands of the Andrianov group.

The Alaska mackerel, found principally around the island of Akutan to the west of Omliaska, in great abundance, is a most delicious fish, and is superior to any Eastern mackerel we have in the market. This fish commands, in the San Francisco market, among those who are not ignorant of their superior flavor, a fancy price over the common Eastern mackerel. This comprises the fishing interests of Alaska, which will be opened to immense traffic in the course of time.

### Whaling and Ivory Interests.

In the more northern portion of Alaska, around and adjacent to Behring's strait, extensive ivory and whaling interests are carried on both by trading vessels and the whaling fleets which leave San Francisco every spring, but harbor with the natives. This branch of industry is too well known to need a description.

### Silver Mines.

Reports came in San Francisco, a few years ago, of what was termed a "mountain of silver," discovered in northern Alaska. Specimens of this ore



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, FEBRUARY, 1883.

ESTABLISHED, 1870.  
Office—320 Sanson St., Bullock Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM!**

Six Months, \$1.25—Postage Paid.

SINGLE COPIES, 20 CENTS.

**ISSUED MONTHLY.**

published Treasury reports, as this article is free from duty.

Of the above, San Francisco imported 47,192 gallons, valued at \$97,118, on which a duty was paid of \$1 per gallon; or \$47,192. The value of pickled olives imported into San Francisco for the year was \$13,892.

Great Britain imports annually almost 5,000,000 gallons.

Nearly all of this comes directly or indirectly from ports on the Mediterranean, and was produced on land, the rivers and streams of which flow into that sea.

## The Home of the Olive.

While the olive is found wild in a certain climatic zone of the Himalaya mountains, and is supposed to

an other products, yield an annual revenue, nature has provided Southern Europe with a partial compensation for the loss of the native forest," and adds: "Some idea of the importance of the olive orchards may be formed from the fact that Sicily alone, an island scarcely exceeding 10,000 square miles in area, of which one-third, at least, is absolutely barren, has exported to the single port of Marseilles more than 2,000,000 pounds weight of olive oil per year, for the last twenty years."

## The Olive Zone.

Humboldt, in his work on the *Geographical Distribution of Plants*, says that the olive (*Olea Europea*) requires a climate of a mean temperature for the year as warm as 67 degs 17-100 Fahrenheit, and the mean of the coldest

the thermometer fall and remain at 18 degrees below freezing.

## Failure of Experiments in Olive Culture in the Atlantic States.

The Isothermal of 57 degs, 17-100 in the Atlantic States passes near Norfolk, Virginia; Raleigh, North Carolina; Atlanta, Georgia; and Memphis, Tennessee. The mean for the coldest months are, for Norfolk, 13 degs 78-100; Raleigh, 37 degs 81-100; Atlanta, 40 degs, 98-100; and Memphis, 48 degs, 19-100. Yet, at times, in all these places, the thermometer falls to within a few degrees below zero. At Atlanta it fell to three degrees above zero in January, 1878. Therefore, all attempts at a successful cultivation of the olive in the Atlantic States have resulted in failure.



A BUDDHIST GARDEN.

## OLIVE CULTURE IN CALIFORNIA.

Home of the Olive—Its Cultivation in Southern Europe—The Olive Zone—What Portions of California is Embraced Within It.

The Kind of Soil in Which the Olive Will Thrive, and the Quantity of Moisture it Requires.

[WRITTEN BY THE LATE HON. R. D. BISHOP.]

During the year ending June 30, 1877, there were imported into the United States 348,431 gallons of olive oil, valued at \$191,431, on which a duty was paid of \$22,776.75. The quantity and value of pickled olives imported during the same period are not given in the

have been transported in some former age from there to Europe, yet practically all of the olive oil of commerce comes from Italy, Spain, France, Greece, Algeria, Morocco and other countries which have coasts on the Mediterranean.

## Olive Products of Italy, Sicily and France.

Becardo says that Italy has 1,235,000 acres planted to the olive, producing annually 39,550,000 gallons of oil. Simmons gives the export in 1854, of that part of Italy and Sicily then composing the Kingdom of Naples, at 36,333 tons, valued at \$41,263,239. Nibban gives the export from Spain for 1873 as valued at \$10,425,000. In 1871, in consequence of the Carlist war, it fell off to \$3,716,000.

France, according to Prudent, produces but a small proportion of the olive oil which it consumes, yet annually exports to the value of \$2,806,000.

George P. Marsh, United States Minister to Italy, says "that in the olive, walnut, chestnut, cork oak, orange, lemon, fig and other trees, which, by their fruit

val month not to be below 41 degs, 5-100. The areas on the earth's surface with the isothermal of 55 degs are comparatively very limited where the mean of the coldest month is but 16 degs. below the mean for the whole year. In this exceptional climate it thrives and gives subsistence and wealth to those who cultivate it. While the mean for the coldest month must not be below 41 degs, 5-100, yet it will live and bear eight degrees more of cold than the orange.

George P. Marsh, who has given much attention to the habits and requirements of this tree, says that when the thermometer falls to 14 degs. Fahrenheit, or 18 degs below freezing, and remains at this point for any considerable period, the shoots are killed and the fruit of that season destroyed. Thus, so far as relates to climate, we have the conditions requisite for the successful cultivation of that tree which the Italians call "a mine on the surface of the earth." The mean temperature for the year must be as warm as 67 degs, 17-100. The mean temperature for the coldest month must be as warm as 41 degs, 5-100, and at no time must

Melanch, in his "Sylva," states that New Sicily, in Florida, was founded in the middle of the last century for the cultivation of the olive, and that a colony of Greeks was brought there for that purpose. The experiment failed, and in 1873 hardly a trace of the settlement remained.

## An Economical Opinion Exploited.

Lewis A. Bernay, who has written a treatise on this tree, says, "Ancient writers upon the olive state that the tree will not survive rears from the sea air. And this opinion has been handed down from generation to generation and is entertained even at the present day by men whose authority on the general subject cannot be lightly regarded. The fact, however, that the olive forms a staple product throughout Spain, even in those parts which are so remote from the coast as to be quite beyond the influence of the sea air, seems to set the matter at rest." Billings, in his article on this tree, in Melanch's "Sylva," says: "It thrives in the center of Spain and in Mesopotamia, at a distance of one hundred



dred leagues from the sea-shore." The explanation of this cause of this belief is in the fact, as shown by Humboldt, that the olive thrives in a semi-tropical climate where the variation in temperature is but small as between the mean for the year and the mean for the coldest month. These conditions are ordinarily found near the ocean. The ocean, in a given latitude, having but a small variation of temperature, winds passing over it to the adjoining land, modify the climate, making it cooler in summer and warmer in winter, than land in the interior not subject to the direct influence of these winds.

#### Variations of the Means of Summer and Winter Temperatures in California.

On this coast the variation between the mean of the winter and summer temperature is, at San Diego, 16 degs. 68-100; Monterey, 9 degs. 65-100; San Francisco, 7 degs. 55-100; Fort Ross, 9 degs. 66-100; Humboldt, 11 degs. 15-100. While in the interior the variations between the means for the same seasons, are for Los Angeles, 19 degs. 63-100; Visalia, 41 degs. 36-100; Stockton, 23 degs. 19-100; Vallejo, 17 degs. 49-100; Sacramento, 23 degs. 27-100; and Chico, 33 degs. 16-100. It may be unnecessary to call attention to the fact that these are the differences of temperature between winter and summer, not between the mean for the year and the mean for the coldest month.

#### Points in California Where the Olive Can Be Successfully Cultivated.

For the purpose of ascertaining where, within this State, the olive can be successfully cultivated, I have gathered from the tables of temperature of the Smithsonian Institute and from the Chief Engineer's Department of the railroad companies, a list of all the places where temperatures fall within these limits which Humboldt states have been found to be essential. The regions which this list represents, could, without doubt, be extended, had more attention been given in different parts of the State to observing and recording the variations in temperature.

It will be remembered that the requisites of successful and profitable cultivation are, that for the year it must be as warm as 57 degs. 17-100. The mean for the coldest month must be as warm as 41 degs. 5-100, and at no time must the temperature fall below 14 degrees I cannot find in any authority how high a temperature it will bear, but as it is successfully grown in Algeria and Egypt, it could hardly be injured by the highest temperatures that occur at the places mentioned in the following list.

PLACES.	Mean of temperature for the year.	Mean of temperature for the coldest month.	Lowest temperature shown by the thermometer in any year.
San Diego.....	1301 62.49	53.30	26—December, 1864
Los Angeles.....	2577 67.59	58.93	29—December, 1876
San Gabriel.....	1841 62.09	45.23	21—January, 1877
Salinas.....	441 51.95	48.25	24—December, 1874
Holli-street.....	2941 61.40	46.59	23—December, 1874
Orleans.....	1033 59.07	44.45	41—January, 1875
San Jose.....	891 59.60	46.58	28—December, 1874
Livermore.....	457 61.49	49.52	28—December, 1870
Bendish.....	141 58.17	47.43	10—January, 1874
Vallejo.....	31 58.71	47.41	39—December, 1870
Fort Tejon.....	3248 58.03	42.05	22—December, 1855
Summer.....	411 58.29	48.71	27—December, 1876
Delano.....	312 58.04	52.46	30—January, 1876
Bordino.....	274 60.37	45.44	20—January, 1877
Fort Miller.....	402 60.50	47.47	13—January, 1854
Merced.....	171 53.10	48.14	28—January, 1856
Modesto.....	21 63.08	47.19	22—December, 1874
Ellis.....	76 63.00	46.40	20—December, 1873
Stockton.....	23 63.09	47.43	31—December, 1872
Sacramento.....	30 60.48	45.21	29—December, 1869
Auburn.....	1363 60.51	45.88	27—January, 1871
Colfax.....	2121 60.05	45.49	26—January, 1873
Marystown.....	11 63.02	48.74	27—December, 1876
Chico.....	133 62.40	45.19	23—December, 1872
Tahoe.....	222 62.30	47.01	24—December, 1871
Red Bluff.....	367 62.22	48.29	26—December, 1873
Redding.....	558 62.14	46.79	25—January, 1876

In the column showing the lowest point to which the mercury has fallen, it should be remarked that it gives the lowest temperature at 7 A. M. Therefore it is safe to conclude that if the thermometer had been self-registering, it would have shown three or four degrees less at 4 or 5 A. M. on the days when the greatest cold prevailed. As, for illustration, this record shows the mercury at Sacramento to have fallen to 28 degrees in December, 1870, yet Dr. Logan stated that twice in twenty-five years it fell to 22 degrees, although it remained at this point but for a short period.

#### A Table Showing Mean Temperatures in Olive Producing Regions.

For the purpose of comparing the temperatures of the above named places in California with those of regions in which the produce of the olive is among the articles of the first agricultural and commercial importance, I have compiled from Budgett's *Climatology* the mean annual and the mean winter temperatures, as also, the mean temperature of the coldest month of the following prominent places in Italy, Spain, Portugal, France, Egypt and Palestine:

PLACES.	Mean of temperature for the year.	Mean of temperature for the winter.	Mean of temperature for the coldest month.
Rome.....	60.07	46.07	45.30
Naples.....	60.35	46.00	47.04
Florence.....	59.04	43.08	41.02
Madrid.....	24.03	46.02	43.02
Lisbon.....	61.04	52.05	51.04
Marseilles.....	60.03	45.02	43.02
Algiers.....	61.03	51.02	52.02
Jerusalem.....	62.00	49.06	47.04
Alexandria.....	65.08	58.05	57.03

A comparison of the above tables will show that so far as they relate to the mean for the year and the mean for the coldest month, the climate of Rome and Sacramento is nearly the same. So is Alexandria and Los Angeles; Florence and Fort Tejon; Lisbon and Livermore; Marseilles and Redlands; Algiers and San Diego; and Jerusalem and Merced. In but one case for this year is there a difference of more than one degree, and in but one case more than three degrees for the difference of the coldest month.

#### The Warm Belt of the Foot-Hills.

Another fact worthy of notice which has been neglected, but for the proof of which the data has not been here attainable, is that the zone in the Sierra, known as the foot-hills, is as warm for the year, and as warm for the coldest month as the Sacramento valley in the same latitudes. This warm belt certainly extends to an elevation of 2,500 feet. Colfax, with an elevation of 2,421 feet, has a mean for the year of 60 degs. 5-100, and a mean for the coldest month of 45 degs. 49-100, while for the same periods, Sacramento has for the year 50 degs. 48-100, and for the coldest month 41 degs. 21-100. Fort Tejon, on the Tehachap mountains, elevations 6,210 feet, for the year, is but six degrees colder than Tulare, in the center of the valley 3,000 feet below; while the temperature for the winter months is nearly the same, Fort Tejon having 42 degs. 5-100, and Tulare 42 degs. 7-100. This zone of warm temperature explains the success in the growth of oranges and other semi-tropical fruits, wherever planted below an elevation of 2,500 feet in the foot-hills of the Sierra.

There have been omitted from the list of stations in California, San Francisco, Monterey, Pajaro, San Mateo, Pineda, Visalia and Tulare, for the reason that in the mean annual temperature, or in the mean for the coldest month they fall below 57 degs. or 41 degs.

Without doubt the olive could be grown in these places, but its cultivation could hardly be made profitable.

#### What Kind of Soil the Olive Requires.

This tree will grow in almost any soil except that containing much moisture. Marsh states "that it prefers a light, warm ground, but does not thrive in rich alluvial land, and grows well on hilly and rocky surfaces." Brumby says "that it thrives and is most prolific in dry calcareous strata, sandy and rocky situations. The land must be naturally or artificially well drained. Its great enemy is excess of moisture. It rejects in the mechanical looseness of sandy, gravelly and stony soils, and in freedom from stagnant moisture." Brandy asserts that it only grows well and yields large crops "in a warm and comparatively dry climate." Dr. Robinson says: "It delights in a stony soil, and thrives even on the sides and tops of rocky hills, where there is scarcely any earth; hence the expression in the Bible, 'oil out of the flinty rock.'" Billhouse, in his article on this tree in Michaux's *Sylva*, says: "The olive accommodates itself to almost any variety of soil, but it shuns a redundancy of moisture, and prefers loose calcareous, fertile lands, mingled with stones, such as the territory of Attica and South of France. The quality of its fruit is essentially affected by that of the soil. It succeeds in good loam capable of bearing wheat, but in fat lands it yields oil of an inferior flavor, and becomes laden with a barren exuberance of leaves and branches. The temperature of the climate is a consideration of more importance than the nature of the soil." Downing, in writing of this tree in Southern Europe, says: "A few olive trees will serve for the support of an entire family who would starve on what could otherwise be raised on the same surface of soil, and dry crevices of rocks and almost otherwise barren soils in the deserts when planted with this tree, become flourishing and valuable places of habitation."

#### Its Adaptability to the Dry Plains of the Interior of the State.

From this evidence it would seem that in the olive we



REDWOOD FOREST, SAN MATEO COUNTY.

have a line that can be grown on our dry plains and naked hill-sides. In the Eastern hemisphere its native of profitable cultivation are as far north as the South of France, and as far south as Cairo, in Egypt. Wherever on the coast, from San Diego in Monterey, and wherever in the interior of the State, within the limits of the temperature stated, there is an annual fall of rain sufficient to produce barley or wheat—on rocky hills or sandy plains, when once rooted, this tree will thrive and bear. For the valley, its extreme northern limit is at Redding, for at Fort Reading, but twelve miles distant and with 110 feet greater elevation, the mercury in the thermometer fell 11 degrees, in December, 1855, which would be fatal.

#### The Olive Limits in the Sacramento, San Joaquin and Tulare Basins.

If we begin two lines starting from Redding, which has an elevation of 628 feet, one on the west side of the Sierra and the other on the east side of the Coast Range, gradually ascending as hillside is descended until they meet at Fort Tejon, in the Tehachap mountains at an elevation of 3,240 feet, we would have the probable limits in the Sacramento valley and adjacent mountains below which the olive could be successfully cultivated.

#### Antiquity of the Olive.

This tree when once planted, is planted practically forever. Some trees in Zaragoza still bearing, from the record of the tax-rolls, are known to be older than four

hundred years. It stands neglect and abuse, but repays neglect by only bearing on alternate years. In the South of France by cultivation and pruning it bears every year. It runs be propagated from cuttings of the branches or roots, from layers, from suckers, from the little knots or excrescences that form on the tree near the ground, called by the Italians *monsti*, and from the seeds in the fruit. When the latter are used the pulp should be removed from the ripe olive, and the seeds soaked for twenty-four hours in strong lye, in solution. They should be planted in a sheltered place, and the ground occasionally watered. Planted in this State in February, the young trees would make their appearance in July. The tree can be grafted or budded in every method used on the apple or pear.

#### Culture of the Olive Tree.

It requires a bearing in six years, but does not come to the limit of full fruitage for twenty-five or thirty years. The average product from each tree is stated at from ten to fifteen pounds of oil. When planted for an orchard, the trees are placed fifteen or twenty feet from each other. Pruning increases the product, and raises the tree to yield annually, as, like the vine, it bears fruit upon the wood of the preceding year. Cultivation of the grounds is not essential, but it increases the product. After the thousands of years that the olive has been cultivated, a few varieties have been selected

#### Expressing the Oil.

In the south of France, where the most care is given in the preparation of oil for market, the olive ripens in November and December. The fruit is gathered before being fully ripe, but is allowed to remain a few days for the evaporation of any moisture. It is then crushed in an edge-wheel mill of stone, usually drawn by horsepower. The stone resembles a large grate with the edge serrated, and the mill is not unlike the bark mill in use in the United States thirty years since. The object in serrating the edge of the stone is to avoid crushing the seeds or kernels, which contain laurin and a little inferior oil. The virgin oil is dipped from the mill and is almost invariably kept to enrich poorer qualities of oil. The pomace is placed in a coarse linen bag about eighteen inches in diameter. Several of these are put into a screw-press and the power applied. The oil expressed runs into a tank. This gives the first quality of oil. The pomace is now taken from the bags, broken up finely and again put under the screw-press for a second and third time, on each occasion yielding less oil and of an inferior quality. After the third pressing the pomace is again broken and a half gallon of boiling water poured into each bag. It is again pressed, yielding an inferior oil used for burning, lubricating and in the manufacture of candle soap. The virgin oil when first pressed is turbid but clears itself by standing in vessels not open to the air. It should be kept in places having an even temperature. The product of all of the pressings is about three gallons of oil to the bushel of olives.

#### Pickled Olives.

The best olive for pickling is the Piccolina (*Olea bingay*). In the south of France it is gathered in October, just before the fruit has commenced to turn brown, the finest are selected and placed in a weak solution of soda, to which time has been added. After remaining in this solution about ten hours or until the pulp can be readily detached from the kernel, they are removed and placed in cold water, which is daily changed for a week. This process removes the tannin from the olive fruit. When they cease to be bitter they are boiled in brine, which is usually made aromatic with coriander or fennel. The next best variety for pickling is the *Olea maritima*, 9th variety in New Duhamel. This is also valuable for oil.

#### Introduction of the Olive into California.

I have found it very difficult to obtain the history of the introduction of the Mission olive into California. It was first brought to America by Antonio Rivera, who took it from Spain to Lima, in 1560. Frezier speaks of the olive being used for oil in Chili as early as 1760. Frank A. Kimball, of San Diego, in an article on the olive in the Southern California *Horticulturist*, states that the first olive trees were planted by the Spanish missionaries at that place in 1769. If this is correct they are now well forward from San Blas, in Mexico, by Don Joseph de Galvez, who fitted out an expedition by virtue of a royal order "to rediscover and people the Port of Monterey, or at least San Diego," which expedition accompanied Father Junipero Serra, in his missionary efforts "to extend the spiritual conquest of the North." Fifty years later it is recorded "that all the seeds that Galvez had been so provident in sending up, took root and prospered. The Fathers built new missions and continually replenished their stock of converts, what at one time amounted to 20,000. They planted new yards, orchards and the olive." From San Diego the tree was transported to nearly all the other missions and from these missions to various places throughout the State. Other than these at San Diego, Santa Barbara and San Luis Obispo, I cannot learn that this tree has yet been planted in orchard form, with the object making profit from its fruit.

#### The Mission Olive.

H. N. Bolander, who had charge of the botany of the Geological Survey of the State, informs me that all of the missions there was but one variety of the olive, one of pear and one of grape.

I have made considerable effort to learn the name of this particular olive, and to ascertain if this variety cultivated in Europe, but without success. John Ellis who has charge of the horticultural grounds at the University, informs me that the seeds of the Mission olive "come correct, and produce fruit of the same kind as the parent." From the fact that the seeds produce trees, bearing the same kind of fruit as the parent, it would be safe to conclude that it is the original stock of the wild olive of Europe or Africa. It is a shy bearer, and has fruit very much smaller than the varieties cultivated in Italy and the South of France. It is probably very valuable as a stock on which to graft or bud more prolific kinds. It has, however, demonstrated that the best varieties can be successfully grown over a wide range in California.

#### A Useful and Profitable Tree.

I can find no other tree so useful and profitable that will grow and thrive with so small an amount of moisture. If, as many believe, an annual rainfall of a few inches can be increased by the planting of trees, I do not know so useful a tree to recommend for this purpose. If it should fail in adding to the rain, it will be certain to thrive on what clouds fall and to be sure to yield oil, whether cultivated or neglected, for what Virgil wrote more than 1,900 years ago is still true. After having described the continuous culture necessary for the olive, he adds: "On the other hand, the olive requires no culture, nor do they expect the crooked pruning hook and tremendous harrow when once they are rooted in the ground and have about the blast. Faith herself supplies the plants with moisture when opened by the hooked tooth of the drag, and weighty fruits are opened by the share. Nature for herself, with this fat and peace-delighting olive."

#### BUTTER YIELD.

The Potlatch Coterie says that, at the present of the Dairyman's Association, W. A. Lewis, a member, stated that he was now making 80 pounds of butter a day from 100 cows.



## SAN MATEO COUNTY.

Suburb of San Francisco—Fine Climate—Resources, Etc.

Towns, Villages and Scenic Remains.

[By the Traveling Agent of THE RESOURCES.]

This fine little county occupies most of the peninsula which separates the ocean from San Francisco Bay, and joins "the city and county of San Francisco" on the north. It possesses a variety of soil, climate, productions, and commercial advantages enjoyed by few localities. Immediately east is the bay, and Santa Clara county, which is acknowledged to be the garden of the Pacific Coast; on the south lies Santa Cruz, the Saratoga of California. It will thus be seen that San Mateo occupies an enviable location. Between the ocean and the Gabilan Sierra Moreno mountains, which run the whole length of the county, is a number of small valleys, in all containing 75,000 acres of tillable land, 17,000 of which are perfectly level. On the eastern side, between the mountains and the bay, is the largest extent or level land, amounting to 40,000 acres, the central part of which the Southern Pacific Railroad passes through. The county is five miles wide at the northern end, where it joins San Francisco, but it rapidly widens toward the south, being eighteen miles wide in the middle. The county is 42 miles long in a straight center line, and in all contains 292,500 acres. One of its principal advantages is its excellent water supply; while there are no large rivers, there are numerous small spring streams. As is well known, San Francisco draws her water from San Mateo's territory, and the excellent facilities of water, of which the Spring Valley Water Co. has availed itself, exist along the entire length of the mountain range; springs, of excellent water, abound everywhere.

The climate is quite as diversified as the soil. It is generally admitted that no finer climate can be found than that between the bay and the mountains, in this county. There is a number of small towns scattered throughout.

#### Redwood City.

The county seat, is the largest town, and contains 1,400 inhabitants. It is situated on the S. P. R. R., at the head of navigation on the bay, only 28 miles south from San Francisco.

It is the center of considerable trade in lumber, livestock, hay, and dairy productions. The town is situated on both sides of Redwood creek, on level ground. The land is dotted with beautiful, wide-spreading oaks; the soil in this vicinity is dark, and a large portion of it is of a black, adobe nature. It is principally owned by some of San Francisco's wealthiest citizens, and is valued at from \$300 to \$500 per acre; it is used more for fine residences than for farming. The redwood business of the county centers here. Among the numerous saw-mills are those of Hanson & Co., at Laborda, on San Gregorio creek, with a daily capacity of 16,000 feet; A. & J. N. Sanders' mills, on Tamitas creek, with a daily capacity of 16,000 feet; Border & Hatch's mills, near Spanishtown, with a capacity of 10,000 feet; and the Gozas mills, near Pescadero, which are run by Chinamen, furnishing about 15,000 feet daily. B. Hayard has a small mill, near Pescadero. This county, at one time, had immense forests of redwood timber, which has mostly been cut out. There still remains about 125,000,000 feet of standing redwood within the borders of the county. The lumber saved in 1892—according to the Assessor's report—amounted to 88,000,000 feet, and there were 10,000,000 shingles manufactured at the eleven different mills in the county. The agricultural products for 1892 are as follows: 24,000 acres of wheat produced 613,000 bushels; barley, 17,500 acres, producing 375,000

bushels; oats, 4,500 acres, producing 173,000 bushels; rye, 50 acres, producing 2,500 bushels; corn, 200 acres, producing 8,000 bushels; beans, 50 acres, producing 1,200 bushels; potatoes, 3,500 acres, producing 8,800 tons; sweet potatoes, 75 acres, producing 230 tons; onions, 50 acres, producing 5,000 bushels; hay, 17,000 acres, producing 25,500 tons; flax, 2,000 acres, producing 1,380,000 pounds; hops, 10 acres, 17,500 pounds. The dairy production was 118,000 pounds of butter, and 275,000 pounds of cheese, besides the large amount of milk sold to San Francisco people; the production of honey amounted to 2,000 pounds, and 1,000 gallons of wine were made. There are, in the county, 2,866 head of horses, 164 mules, 6,627 milch cows, 4,692 head of cattle, and 2,329 hogs. The fruit crop of 1892, valued at \$3,500, was grown on 50 lemon-trees, 170 orange, 90 olive, 11,000 apple, 3,070 pear, 261 fig, 2,820 plum, 2,750 peach, 330 quince-trees, and 112 acres of bearing vineyards. By giving a detailed account of all the different productions, we enable our readers to form some idea of the capabilities of this little county. Besides the above industries, wood is liberally supplied, as a large force and much capital have been devoted to the cutting and shipping of fuel to this city. The Italian vegetable gardens, producing cabbage, lettuce, and other root crops, cut no small figure in San Mateo county.

The population of the entire county, in 1890,

Redwood City, at from \$150 to \$500 per acre, according to improvement. In this vicinity is J. C. Pland's country residence, and the late Milton S. Latham's beautiful country home.

#### Menlo Park.

A beautiful country place, a few miles distant from Redwood City, is surrounded by fine country homes, such as those of John T. Doyle, Ex-Mayor Rathborne, and the late Thomas H. Selby. A short distance is the "Palo Alto" ranch of Ex-Governor Stanford, where the finest horses in the State are bred. Milton & Titus' carriage and wagon factory is quite a feature in Redwood City. Chamberlain & Wilson's large store of general merchandise, consisting of drygoods, groceries, furniture, etc., would compare favorably with similar establishments in large cities. Menlo Park has a fine hotel, kept by Mr. James Vance. The town contains about 800 inhabitants. A few miles north-west, on the same railroad, brings us to the beautiful village of

#### Mayfield.

The land, as in the vicinity of Menlo Park, is owned in large tracts by a few wealthy citizens, who have beautifully improved places. Mayfield contains about 900 people. The hotels are Beatty's, kept by A. S. Beatty, and the Occidental, kept by Mrs. C. Decker. There is one large general store, that of J. Rosenblum, who has been engaged in the mercantile business for a number of years, and has built up

Schuyler, who has accommodations for 100 guests. The house is well furnished, and here may be seen some of the finest sea-moss and agate—a perfect gallery—very artistically arranged by the landlady. The beach, near by, affords beautiful specimens of sea moss, of all conceivable colors.

Immediately across the street from the above house, is the Ocean View Hotel, kept by J. S. Weiley, with good accommodations, at reasonable rates. The general stores are kept by Levy Brothers and Jacob Rosenblum, and there are several smaller ones. C. C. Wilker keeps the Half-moon hay drug and stationery store. The Half-moon Bay brewery of A. Schuyler, manufactures about 500 barrels of beer annually. These constitute the principal business houses. Two and one-half miles from this place is

#### Ames Port.

Where the P. C. S. steamers call regularly for freight and passengers. The principal conveyance is by stage, from Half-moon Bay to San Mateo a distance of 21 miles by A. Taft & Garretson's line. The same company run a line from San Mateo to

#### Pescadero.

A distance of 32 miles via Spanishtown—fare, \$3.50. The road runs within full view of the broad waters of the Pacific. The land along the ocean is all good farming land, and is sown to oats, barley, hay, and potatoes. The best-

improved land is valued at from \$100 to \$150 per acre, the rolling hills at from \$20 to \$40, and the more rough pasture lands at \$5 to \$10. Stages run from Pescadero to Santa Cruz, 38 miles, via Davenport, Seaside, and Pigeon Point. Near Pescadero are fine redwood forests and beautiful camping-grounds. One and one-half miles west brings us to one of the finest, pebbly sea-beaches, where all kinds of opul,agate,onyx, carnelian, and bloodstones are found, also an endless variety of mosses. One of the leading attractions of Pescadero is the

#### Swanton Hotel.

And cottages, acknowledged to be one of the finest summer resorts on the coast. It is open all the year, and is kept by C. W. Swanton; it has a fine fruit orchard and dairy connected with it. Immediately across the street from the hotel is the large

general store of J. Garretson, one of the proprietors of the stage lines leading out in different directions from the place. Pescadero has an excellent, cool, summer climate, with extensive redwood forests on one side, and a fine, pebbly ocean beach on the other.

#### Laborda.

Sixteen miles south of Redwood City, in the midst of the redwood timber belt, is a summer resort. The hotel is kept by J. H. Sears, who spares no pains to make his guests feel at home. The streams here are full of brook trout and other fish, and the woods, near by, are filled with small game. These advantages, together with its nearness to San Francisco, make it popular for those who take a summer vacation from an active business life.

We would like to extend our description of this beautiful little county, but our space does not permit it.

#### CATTLE FEEDING.

The *San Francisco Gazette* says: The scarcity of cattle in the East, and the subsequent rise in the price of beef has aroused the cattle dealers to activity, and all the cattle are being fed that hay can be found for. There are more feeding at present in Honey Lake valley, says the *Greenville Bulletin*, than has ever been known before. There is an unusually large crop of hay raised there this year, and it is now all sold, going readily at the first for \$5.50 and soon increasing to \$6 per ton. Over 4,000 head of beef cattle are being fattened in the Tule district alone.



CAMPING SCENE NEAR PISCADERO, SAN MATEO COUNTY.

was only 8,074. Redwood City, really a suburb of San Francisco, is a delightful place of residence, on account of its fine climate, beautiful flower-gardens, and close proximity to the metropolis. The

#### Hotels.

Are the Grand, kept by Wm. Funn, who has accommodations for 150 guests; the Redwood City house, a new, cosy building, which was built less than one year ago, and is kept by C. Hynding; the Tremont, on Main street, which is kept by Charles Ayers, who has accommodations for 40 guests; and the Farmers' Home, kept by James Horu, who gives good accommodations to the economical traveler, at reasonable rates.

Redwood City has two breweries. The Enreka, located in the business center of the place, has a capacity of 1,000 barrels annually, and is owned by J. Hodler. The Pioneer, established eighteen years ago, at the south end of town, is owned by M. Kreiss, who can turn out 5,000 barrels annually. Between this place and the business center of the town are the Redwood City mills of L. Nelson, who manufactures from 30 to 35 barrels of flour daily. The city supports two local

#### Newspapers.

The San Mateo Journal, issued every Thursday, and published by S. C. Leahy, and the Times and Gazette, issued by the San Mateo Publishing Company. Michael Walsh, a dealer in real estate, rates land within five miles of

an extensive business. Here are also the lumber yards of Wm. Puges. A few miles nearer San Francisco brings us to the village of

#### San Mateo.

Which contains about 600 inhabitants. Land in this vicinity is a fine, dark loam, and is valued at from \$100 to \$700, and up to \$1,000 per acre. There are several fine brick blocks and several hotels. The Walker House, kept by Eugene Walker, is the principal one.

The drug, book, and stationery store of Charles M. Morse is worthy of special note. Here we board Andrew Tafis' stage, and go over a beautiful, picturesque mountain road, in full view of the Spring Valley Water Company's artificial lakes, and amid some of the finest scenery in the vicinity of San Francisco, a distance of thirteen miles, to

#### Spanishtown.

Located on Half-moon bay. The town is situated near the ocean beach, and has a population of 500. Here are located the agricultural works of R. I. Knapp, who is manufacturing Knapp's patent side-hill plow that is so well known throughout the mountainous portions of the State. They are extensively sold by the wholesale dealers of San Francisco, and are considered the best side hill plow in the market. James Benlah's carriage, wagon, and general blacksmith shops are here. The town is watered by the San Benito Water Works.

#### Schuyler's Hotel.

A three-story building, is kept by James



## SOME ARTESIAN WELLS.

In accordance with our promise, we here give the statistics of some of the most noted artesian wells in the world. As the question of artesian water is now and always will be of interest to the people of this section, we think these figures will be read with attention by all:

At St. Louis, Louisville and Charleston are some of the most important wells in the United States. At Louisville the well is of three-inch bore, is 2,086 feet deep, and flows at the rate of 330,000 gallons per day, the water rising with a force equivalent to ten-horse power.

At Charleston, S. C., is an artesian well 1,250 feet deep, which discharges about 1,200 gallons per hour at ten feet above the surface.

In Inyo county, Ill., at a distance of 85 miles from Chicago, are some 200 wells within a radius of about 20 miles. Their average depth is 70 feet, and their flow varies from 20 to 120 gallons per minute.

At the Continental Hotel, in Philadelphia, is a well 200 feet deep, yielding 50,000 gallons per day.

At a number of points in the Llano Estacado, in New Mexico, wells have been sunk by the Government and water always obtained.

At the Point of Rocks, on the Union Pacific Railroad, in the midst of a great alkali desert, an artesian well furnishes an abundant supply of pure water for the use of the railroad.

Crossing the ocean, we find numerous wells, some of them having an astonishing flow. At Bourne, England, is a well 92 feet deep, with a discharge of 557,000 gallons of water per day.

A well at Aire, in the province of Artois (whence the name artesian), which was bored over a century ago, has flowed steadily ever since at the rate of 15,000 gallons an hour.

At Lillers, France, is a well which has flowed steadily since the year 1120, a period of over seven and a half centuries.

The Grenelle well, in the Paris basin, has a depth of 1,797 feet, and the flow is 500,000 every 24 hours.

At Pisy, is a well 1,023 feet in depth, from which the enormous amount of 5,500,000 gallons per day is discharged.

In the desert of Sahara, a French engineer commenced, in 1858, to seek artesian water. He soon obtained a well with a flow of 1,000 gallons per minute. Since then many more wells have been sunk successfully, and a large extent of heretofore entirely desert country has been successfully put under cultivation.

We think that the most casual inquirer into this question can but be convinced, even though against his prejudice or interest, that the possibility of obtaining artesian water is practically unlimited, and with proper appliances no seeker after water in that form need go unrewarded, at least in our section.—*San Bernardino Index.*

## DISTRIBUTING SAMPLE PRODUCTS.

One of the best ways to spread the fame of California products is certainly to distribute them, so that consumers everywhere may judge by sight and taste of their excellence. For this reason we regard with satisfaction efforts like the following, which is described by the *Los Angeles Express*: Messrs. Woodhead & Gny shipped per order of Mr. Wm. Priddman, 24 sacks of oats—wheat and almonds—to Kansas City. They are from thence to be distributed to different portions of the East, as samples of Californian wares, thus creating a market and building up a trade in those articles. Mr. J. J. Valentine, of Wells, Fargo & Co., will see to the distribution of the samples, and is taking a lively interest in introducing Californian products to the East.

## RED SNOW.

At a recent meeting of the San Francisco Microscopical Society, Dr. Harkness presented a bottle of "red snow," which he gathered last June on the Wasatch Mountains. The red snow was found on the north side of a spur which rose about 10,000 feet above the sea-level. When fresh, the snow has the appearance of being drenched with blood, as though some large animal had been killed. The "red snow" is caused by the presence of a one-celled plant, called *Protoconus nivalis*, which reproduces itself by subdivision; that is, the cell divides itself into several new cells. This is done with great rapidity, and a few cells lodged in the snow, under favorable conditions, soon will give it the appearance of "red snow." It was remarked that the phenomenon of red snow had been observed from the earliest times, as Aristotle has a passage which is thought to refer to it. The subject was, however, lost sight of, until brought up by the investigation of Saussure, who found it on the Alps, in 1760. He made chemical tests, which showed him that the red color was due to the presence of vegetable matter, which he supposed might be the pollen of some plant. In 1819, an Arctic expedition, under Captain Ross, brought some specimens from the cliffs

## HOMES FOR THE IMMIGRANTS.

The great number of immigrant families now constantly coming into this State must have homes, and the greater part of them are prepared to buy small farms, or to take up such small Government tracts, as their means will allow them, individually, to work. This is as it should be; we need small homes, and many of them. The full excellence and capability of our California soil will never be demonstrated until all our valleys and hill-sides, mountain hollows and chapparral ridges are dotted thick with cottages, each the shelter and roof-tree of a separate family, each with the center of its own small dominion of cultivated acres. A family here can thrive and grow rich on a farm not half as large as would elsewhere be required to barely furnish them the necessities of life. Every facility should be given the new home and since now being joined to our population, to assist in adding to the steady and swift progress which our State ought to make during the next 25 years. If some, or all, of our brilliant political speakers would exercise their energies for a couple of years on the proper distribution and development of the thousands of acres of land yet lying useless and uncultivated in our State, it would add more to the people's advancement than a hundred cen-

## LARGE CALIFORNIA ESTATES.

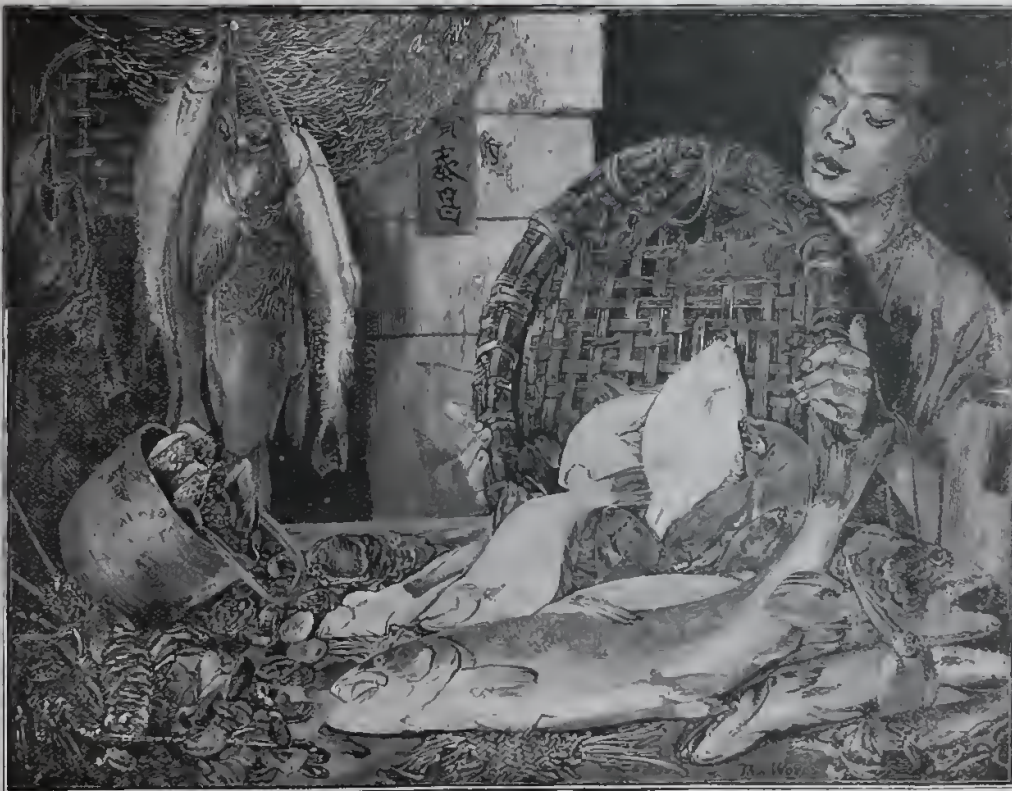
The Haggin, Carr, and Tevis property is divided into a number of separate ranches, each with its resident superintendent. The Bellevue Ranch, so called, is the center and focus of authority for the whole. Here is the residence and office of the general manager, and here is assembled a force of book-keepers, engineers, and mechanics, who keep the accounts, map, plan, supervise, construct, and repair, and give to the whole the clock-work regularity of a great commercial enterprise. The numerous buildings constitute a considerable settlement. There is a "store" of general merchandise and supplies. A dormitory and a dining-hall have been erected for the laboring hands. A tower-like water-tank, surmounted by a windmill, and accommodating a milk-room below, rises at one side. There are shops for the mechanics, capacious barns, and long sheds filled with an interminable array of agricultural implements. It is worth while to take a walk past this collection of reapers, threshers, sickle plows, and rakes, and study out their uses. The immense "hewer and separator" rises from the rest, like some awe-inspiring leviathan of the deep. A whole department is devoted to the "road scrapers," "huck scrapers," and plows of various sorts, used in the construction and dredging out of the irrigating ditches. The soil is, fortunately, free from stones, and the work is, for the most part, quite easy. One enormous plow is seen, which was designed to be drawn by 60 yoke of oxen, and to cut at once a furrow five feet wide and four deep. Like the famous steamship Great Eastern, it has defeated itself by pure bulk, and is not now in use.

More than \$500,000 have been expended on the great estate, in the item of fencing alone. An average of 100 laborers are employed, and in the harvest season, 700. The rate of wages is quoted at from two and one-half to three dollars per day to mechanics, and one dollar per day to common hands. This seems low, as compared with information from other sources, and that which appears in the chronic complaints of the scarcity of farm labor, in the Californian papers.

No great portion of this domain appears to be now in the market at the disposal of settlers of small means, though the intention is avowed of offering some of it in this way when all shall have been thoroughly reclaimed. Numerous tracts, however, are occupied on very favorable terms by renters, as they are called. They take from 120 to 600 acres. Very many of them are Portuguese and Italians. They are usually married, work in companies of from six to fifteen persons, and wear the red Gamblin shirt. The renter is provided by his landlord with a house, an artesian well, a credit to a moderate amount in the general store, and the use of some cows. He has the milk of the cows, but must give their increase to the estate. His lease runs three years, and he pays, as rent, one-third of his crop. Instances of large profits are frequent among these persons, and, no doubt, the same opportunities are open to others who may wish to follow their example.—*Cor. Harper's Magazine.*

## CALIFORNIA'S GOLD YIELD.

California is the best gold field yet discovered in this country. The yield last year was \$15,000,000. It once reached as high as \$10,000,000 to \$50,000,000 per annum. Some authorities claim that the gold product in the State, from 1851 to 1857, was from \$55,000,000 to \$60,000,000 per annum, and that in 1863 it reached \$65,000,000. Since 1848 the gold yield of this State has probably been \$1,155,000,000. Some claim \$100,000,000 more, but the latter figure is supposed to be the nearest to actual fact.



CHINESE FISH MERCHANT, SAN FRANCISCO.

around Buñin's Bay, and they were examined by eminent botanists, some of whom mistook the nature of the plant, and there was a long discussion as to its proper classification, some holding it to be a fungus, some a lichen; but it was finally set at rest, as one of the unicellular algae. It is of interest, also, that some of the early examiners pronounced the color due to animalcules, but this was disproved. Dr. Harkness said that during his visit to England, he saw the original bottle of specimens brought from the Arctic more than 60 years before, and in which the *protoconus* could still be seen with the microscope.—*Schmidle Avaricus.*

## SMALL FARMS.

The *San Jose Mercury* says "that the large number of sales of small farms which are being continually made by our real estate agents is most satisfactory proof that the Santa Clara valley is entering upon an era of substantial prosperity hitherto unknown. The parties who buy these small tracts are for the most part thrifty men, with some capital, from the Eastern States, who knew that small farms thoroughly and intelligently worked are far more profitable than large tracts conducted in sheep-shed, half-hearted manner. They understand what they are about, and most of them will realize their anticipations."

ies of the stump eloquence we are yearly treated with. The excellence and capability of our rich California soil will never be fully demonstrated until these small homes take the place of the extensive sheep-walks and grizzly haunts now owned by a few selfish and careless capitalists. When every hill-slope and mountain hollow, isolated valley, barren plain, and chapparral ridge from Shasta to San Diego is thus utilized, and not till then, we shall have achieved the full realization of the dream of the first white explorer who sailed by our golden shore. He said, transcribing from his quaint diary—"It is a fair and pleasant land, wherein both catch that is goodly for the dwelling of Christians."—*Santa Barbara Press.*

## POTATO YIELD.

The *Inyo Independent* says: Dr. W. H. George informs us that a gentleman at Bishop cultivated 2,373 pounds of potatoes from 12 pounds of seed on a piece of ground two by five rods in extent. This is at the rate of over nineteen tons per acre. The variety is called the "white star," and has but recently been introduced in this valley. Some of our ex-laborers have been "blowing" about a yield of eighteen tons of potatoes on a single acre of ground in one of the coast counties. Inyo goes them one ton better.



## MARIN COUNTY.

**Topography—Soil—Climate—Dairy Productions, Etc.**

**Towns, and Their Industries, Described.**

[By G. D. H., Traveling Agent, No. 2.]

Marin county takes its name from an Indian chief of some celebrity during the years of the Spanish occupation. This Indian had his headquarters on one of the small islands in San Francisco bay, east of San Rafael, which, at present, is known as Marin Island, in honor of the chief.

Marin is situated on the north side of the Golden Gate, and therefore constitutes the peninsula that lies between the north arm of the San Francisco and San Pablo bays, on the east, and the Pacific ocean, on the west; on the north it is bounded by Sonoma. It is irregularly-shaped, and is one of the smallest counties in California. Notwithstanding it has an area of 357,096 acres of land, only 331,430 acres of this is upland; the remainder, mainly swamp and overflow tide lands, bordering on the bays and estuaries, will, it is thought, be levied, and become valuable, at no distant day.

**Assessed Land.**

The number of acres of land on the assessment roll is 319,802, leaving 37,294 acres which are not assessed, nearly all of which consists of barren and rocky bluffs along the coast. The taxable property of this county amounts to \$7,581,065, showing a gain, since the last assessment, of \$24,165, which is a more satisfactory showing than some of the larger counties can boast.

The surface of the country is mostly broken and hilly, with but a small portion of level, or valley land. There are high, sharp, rugged hills, with narrow valleys, bordering on the numerous creeks which find their way to the ocean and the bay. The highest elevation in the county is Mount Tamalpais, 2,608 feet above the level of the sea; it is about six or seven miles from San Rafael. From its summit, which is easy of access, one may see, on a clear day, the broad expanse of the ocean, and gain a superb view of the Golden Gate, the entire surface of the bay, and San Francisco, including the numerous towns and villages that border on this, the finest harbor in the world.

There is but little farming done in this county; the soil is of a black, loamy nature, and is suitable for the production of vegetables. The rolling lands are mostly black adobe on top, mixed with gravel, and a stiff clay sub-

soil, and are adapted to the production of the natural grasses. Nearly all of the land is held under Spanish land grants, consisting of 21 different grants, containing over 300,000 acres.

At the present time there are several land-owners in the county who rent their lands in suitable tracts for dairying purposes. They have the farms fenced into tracts of from 500 to 1,000 acres, each with dairy houses and barns, and a sufficient number of dairy cows to consume the feed. These farms are rented to tenants at the rate of \$20 to \$25 per cow per annum, upon which the renter makes a good profit, as is evidenced by their prosperity.

Marin has the privilege of enjoying the prevailing winds of summer which blow from the ocean, and pour upon the hills and valleys in the western and southern portions a constant stream of fog, which keeps the grass green long after it has withered and gone in the interior portions of the State; it thus gives Marin county an advantage over all the rest of the State, as regards dairying.

Marin county butter is sought for by dealer and consumer, because of its superior quality. This is attributed to the even temperature, superior grasses, and cool, pure water. Last year there were registered on the assessment roll 23,767 milch cows, and 32,217 stock cattle, besides 6,280 head of hogs, which speaks well for as small a county as Marin.

**First Settlers.**

Marin county was first settled, by whites, at the Mission San Rafael, by Don San Luis Antonio Arguello, who was captain and commander of the Presidio of San Francisco, and Governor

ad interim of California, under the unfortunate Emperor Iturbide. The first family that settled in this county was that of Rafael Garcia.

**Population.**

The last census gives Marin county a population of 11,307 white people and 1,500 Chinese, who are mostly engaged in fisheries along the shores of the bays.

**San Rafael.**

San Rafael is one of the most picturesque suburban towns adjacent to San Francisco. It is reached by two ways: either by means of ferry to Sausalito, where one enters the cars for a ride of some ten miles, among romantic and inspiring scenery, to San Rafael; or by ferry to San Quentin, and a ride of three miles in the cars, when the county seat of Marin, San Rafael, is reached. It stands about three miles back from the water, and commands a view of the upper end of San Francisco bay, surrounded on all sides but one by hills, which are barriers to break the force of the sharp blasts that rush across the San Francisco peninsula, and thus leaves San Rafael between the hills, free from hard winds, and completely sheltered. This accounts for the fine, balmy, summer climate of San Rafael. Notwithstanding the amount of rain, in the winter months, there are weeks of warm, spring-like weather.

San Rafael is different from other small villages in the vicinity of San Francisco. It contains a population of 2,300 people. The buildings, both public and private, have a fresh, clean appearance, amidst the most exquisite scenery, which strikes the vision with wonder

who have on hand and are dealers in all kinds of interior decorations, window-shades, etc. They have been established only one year, and are doing their share of the business.

Wm. Sale, who has been established here since 1875, has the oldest establishment in his line in the county. He sells furniture, upholstery, carpets, etc., as cheaply as one can purchase them in San Francisco.

The grocery business is well represented. Haskell & Co., formerly of Haskell's tea store, under the Grand Hotel, San Francisco, seems to do the greater share of the business. He has been established here since 1879.

The banking business is carried on by M. M. Gordon and A. P. Howling, who represent a cash capital of over \$200,000. They have been established since 1871.

**Hotels.**

San Rafael has some fine hotels, among which is the Tamalpais, a large, three-story mansion, with five cottages connected. It is situated in the western part of the town, and is a first-class home for the pleasure-seeker or traveling man, as it has accommodations for 125 people. In a stable, connected with it, are kept riding ponies and five phaeton carriages, for the use of guests. The proprietor, Mr. W. G. Graham, is the most popular hotel man in California.

The New England Home is kept by Dr. C. N. Miller and Blanche Burroughs, M. D. This is a large, commodious, two-story building, with six cottages connected, each bearing the name of a New England State. It is a pleasant

takes its name has a paper mill, located on the the banks of a beautiful stream of water, and near magnificent forests of railroad and pine. This is a popular place for city people to camp during summer. The next place noted is

**Drama.**

A station that takes its name from the town of Olema, about three miles back from the road. There is one general store, hotel, etc. It is situated at the head of Tomales bay, adjacent to a fine dairy section. In a few miles the road takes the shore of Tomales bay, and follows it until we reach Tomales creek, where we have the bay and take a northerly course up a canyon, until we arrive at

**Tomales.**

The second town in size in the county. It is a pretty village of about 200 inhabitants, and is situated in a fine dairy and agricultural section of the county; it is noted for its potatoes and butter. There are two churches, a good school building, public and Odd Fellows' halls, two general stores, the Bank of Tomales, for the accommodation of the large dairy interests, representing a capital of \$50,000, and a surplus of \$50,000. It does a general banking business; its officers are Warren Dutton, president; T. J. Able, cashier.

Dr. G. W. Dutton, who has been here 23 years, keeps the only drug store, and also practices his profession.

The Tomales Market is kept by Charles T. Thompson, who does a good business in his line, supplying nearly every station on the railroad, from San Rafael to Duncan's Mills.

He reports business to be double that of 1881. He has been established ten years.

Peter Delesse is proprietor of the stove and tin store, and his brother, Joe, owns the Sonoma brewery depot; both have but recently opened business.

Guldayer & Murphy are inventors and manufacturers of their "Independent platform spring break cart." The shafts are connected with the axle by a coil spring, which relieves the body from all motion of the horse. It is decidedly far ahead of all other carts we have seen.

There are two hotels, of which the Plank House is the best. It is kept by Mr. F. A. Plank, a gentleman who makes his guests comfortable, and sets one of the best tables it has been our good fortune to enjoy. He has accommodations for 25 guests. We now proceed up the road a few miles, when we come to

**Valley Ford.**

Where Hentley & Cook have a fine flouring mill, which is kept busy converting wheat grown in the vicinity into flour, etc. We are now in Sonoma county, and the next place of importance is

**Howard's.**

On the summit of the hills, from which large amounts of wood, railroad ties, etc., are shipped. Up the road we proceed, winding along beautiful streams, through forests of redwood, and we are soon on the banks of Russian river, along which we ride for several miles, until we cross it on a magnificent bridge, and are at

**Duncan's Mills.**

The terminus of the railroad. Here we find one of the oldest saw-mill firms in California, namely, the Duncans, from whom the town derives its name. As early as 1850, the Duncans, in company with Governor Stoneman, erected a saw-mill, about three miles from where Freestone station now is; it was the first mill erected in California. Duncan's Mills is correctly named, as their mill gives to the place quite a business appearance. They saw 7,000,000 feet of lumber annually, all of which is shipped to San Francisco and intermediate points. They have a railroad, for logging purposes, which reaches up into their vast redwood and pine forests. It is six miles long, and is equipped with an eight-ton locomotive and a sufficient number of trucks to transport the millions of feet of logs to their mills. They have 3,500 acres of fine redwood and pine timber land, which will produce 100,000,000 feet of lumber. They have a large store in town, near the mill, which does credit to the place.

The past year, S. Schloss, with Mr. Schu-



MOUNT TAMALPAIS, MARIN COUNTY.

that such romantic and beautiful scenery is so near busy San Francisco, and comparatively so little known.

The streets of the town and all the approaches are in keeping with the place. The town is lighted with gas and supplied with water from an artificial lake, midway up Mount Tamalpais, which gives San Rafael pure, mountain water, clear as crystal, which is a great benefit to the inhabitants.

Land located in the suburbs of the town is valued very highly, selling from \$500 to \$3,000 per acre, owing to the elevation and location. Mr. W. J. Miller is the leading real estate dealer who can elucidate the beauties of climate, drives, and scenery. His long experience entitles him to the confidence of those who are desirous of buying, selling, or leasing a home-stand in the beautiful town of San Rafael.

**Business Men.**

There are quite a number of reliable contractors and builders here. S. H. Kilen seems to take the lead; he is agent for the Alhousa windmills, represents five of the best insurance companies in existence, and has been established eleven years.

On A street, opposite the depot, we find Hanson & Lund, dealers in every description of building material. They have been established less than a year.

Isaac Shaver, who has a planing mill and lumber yard on Shaver street, furnishes all kinds of mill-work, paints, oils, and hardware for several of the public residences in course of construction.

Near the railroad depot are H. Kuitell & Co.,

home in which to spend the winter or summer.

The Central Hotel is centrally located, and has accommodations for 200 guests; J. C. Sanborn is the popular proprietor.

The German Hotel, one block from the railroad depot, is superintended by Thos. H. Nichols, and is a convenient place for travelers. The Delmonico, a cosy little hotel, near the railroad depot, is kept by D. W. Barnard, a genial landlord, who is quite pleasant to his guests.

Among the places of recreation and amusement, we will mention the San Rafael park, kept by George Clausenius, and Zopf's wine gardens, near H street station, a pleasant suburban resort, with a fine vineyard of four acres, where choice wine is manufactured. San Rafael also has a well-arranged open house, besides several halls for public entertainment.

**Press.**

The press is represented by two weeklies. The Marin county Journal, established since 1861, is issued every Thursday by S. F. Burston.

The Marin county Tocsin is issued every Saturday by James H. Wilkins; these constitute the press of the county.

We now take the North Pacific Coast Railroad for a trip to Duncan's Mills. The road is a continuation of the same beautiful and romantic scenery mentioned from Sausalito to San Rafael. We wind around curves, ascend grades, pass through tunnels, etc. The first place we will mention is

**Taylor's.**

Where the gentlemen from whom the station



man, no manager, has opened a general store; they do a good business.

The Russian River Hotel, kept by Queen & Goode, is a well-kept house, and has a livery stable connected with it; this is a favorite resort for tourists and hunters.

The leading blacksmith is T. Moore, who understands his business in all its branches.

John Orr, who has been located here for 27 years, keeps Orr's saloon, and is a pleasant and agreeable gentleman. There are a few other places of business, but, owing to our short stay, we fail to remember them. We now take the train for San Francisco, feeling well pleased with our trip over the North Pacific Railroad.

#### FACTS FOR SETTLERS.

Last week we spoke of the fact that land in the vicinity of Anaheim was far cheaper than similar land in other parts of the county. From the number of sales lately made, there is no doubt that we will soon be deprived of this argument in writing paragraphs to induce immigration. Land is steadily increasing in value—we know of more than a dozen tracts which were rated at \$50 an acre three months ago, and which cannot now be bought for \$75 an acre. It is evident, therefore, that it would be wise for new-comers to this county to buy some of this Anaheim land while the price is yet reasonable and within the reach of people of moderate means.

There is probably no land under the sun which can be put to more varied uses. This is the home of the vine. No better wine was ever made in California than that which has just been made by 30 or 40 wine-makers of Anaheim. Nor can better raisins be found anywhere than those made in this vicinity. This industry is yearly assuming greater proportions here. It has been heretofore insignificant for the reason that the wine grape was made a specialty, but since it has been demonstrated that there is a profit in raisin-making, more attention has been paid to that industry. Orange trees grow luxuriantly, and in North Anaheim, are orcherds in no respect inferior to any in the county. Apples, peaches, pears, and nearly all northern fruits are grown with results which rather surprise people who come here with the idea that only semi-tropical fruits excel. We have the word of an old gentleman, just arrived from Illinois, that the apples grown in Anaheim are larger and have a finer flavor than those grown in that State. Apricots, a fruit which is destined to become the most valuable product of this county, grows here to an almost phenomenal size, and the trees are very productive. We have the testimony of the Superintendent of the Los Angeles cannery that the best apricots received at that establishment last season came from Anaheim; and this tribute is all the more valuable because of the large area of country from which the cannery was supplied.

There are in this vicinity large tracts of poor, sandy soil, which unthinking people would undervaluingly pronounce worthless. But we beg to remind our readers that ten or twelve years ago seven men out of ten who came to Los Angeles county pronounced as only fit for sheep pasture the very land which is to-day worth from \$75 to \$300 per acre. These sandy, almost arid, tracts will yet be valuable groves. It is just the kind of soil on which are the finest olive orchards of Europe; nay, it is even more fertile than the soil along the Mediterranean, whence comes the most famous olives. Too little attention has been given to this tree, but when once the people understand the immense profits of olive culture, and appreciate the fact that the tree grows and flourishes on a soil almost too poor to raise anything else, we may expect to see the olive as largely planted as the grape and the orange.—*Anaheim Gazette*.

#### A GRAND IRRIGATION SCHEME.

The San Bernardino *Times*, referring to a scheme which, if carried out, will result in untold wealth to that valley, says:

A short time ago the *Index* had a short editorial commenting upon the feasibility of building a system of reservoirs in the mountain canyons north of San Bernardino, and thereby supplying water to irrigate the vast tracts of land, in comparison with which the cultivated area is a mere bagatelle. We were not then aware that the realization of such a project was likely to be effected in the near future, and are very much pleased now to state that such is the case, and that the scheme is now under advancement by a man who has individually the capital to accomplish the work. We refer to Governor Stanford. The feasibility and advantages to be derived from this work was first presented to the railroad magnate by Colonel C. H. Larrabee of this city, and as a result of his interview Mr. Clements, the consulting engineer in Mr. Stanford's employ, was sent here to take a view of the ground and make a report. If this report is favorable, an engineer will be sent into the field to make a technical survey. It is, beyond the slightest doubt, a practical scheme, and we are therefore satisfied that Mr. Stanford will inaugurate and execute the work with the same energy and ability that have attended his other enterprises.

#### NEVADA COUNTY, CALIFORNIA.

This is the chief of all the mining counties of the State of California. It has a middle situation in the State, but is generally ranked as a northern county. The chief industry is mining, although farming is carried on with profit in the western portion of Nevada county. No equal area in the world has produced more gold than has Nevada county, and no region known has the promise of an equal mining permanency. The gold is found in both quartz ledges and gravel beds. Nevada and Grass valley townships are the principal portions in which quartz mining is carried on. Eureka and Washington townships, further east and higher of altitude than the first two named, have also many valuable quartz ledges. The mines in Grass Valley and Nevada townships have been systematically worked and developed for many years, those of Washington and Eureka have received but little of the proper kind of attention. It will not be many years before deep and paying mines will be developed in the Washington and Eureka townships. Meslow Lake has also many quartz ledges, which, in former times, attracted so much attention that a city was built, in almost a day, near the very summit of the Sierra Nevada. The Meadow Lake mines are idle now, and time alone will tell if the ledges there have gold sufficient to cause mines to be made. Rough and Ready township has many gold-bearing quartz ledges in its eastern portion, while in the western part are valuable deposits of copper.

The great gold gravel region of the county is in the townships of Bridgeport, Bloomfield, Eureka, Little York, and Washington. These are of immense extent, and of incalculable richness. These beds are worked by the hydraulic process, for the most part, and enormous values of gold are annually washed out of them. There are some gravel mines in Nevada, Grass Valley, and Rough and Ready townships, but they are not extensive—excepting at Mooney Flat in Ingham and Ready, where is the extension of the famous gravel leads of Timbuctoo, Smartsville, and Sucker Flat.

The most famous of the present active quartz mines are the Idaho, New York Hill, and Empire. These are dividend payers at the time of this writing. One of them, the Idaho, paid on the first Monday in December, 1882, its 162d dividend. The mine has produced over \$6,000,000, and has kept in constant employment, and at three-dollars-a-day wages, a large number of men. The Empire is the oldest of all the mines now working in this State, and it, as well as the Idaho, gives promise of indefinite continuance. The Allison Ranch, North Star, and some others that were celebrated as gold producers in times past, will soon be worked again. Cheap water-power, for machinery, will cause those mines to resume, and the water-power is coming within a few months after the issue of this publication.—*Grass Valley Tidings*.

#### COST OF BUILDING AMERICAN SHIPS.

In giving testimony before the Congressional Shipping Committee, in regard to the cost of iron ships, John Roach stated that he had just taken a contract for building a first-class iron ship at \$65 per register ton. This ship, we learn, is to be built for Wm. H. Starbuck for the Pacific trade. Her dimensions will be 1,800 tons register, 3,000 tons dead weight capacity; length, 214 feet; depth of hold, 23 feet; breadth of beam, 42 feet; and draft, 21 feet. She is to be ready by about April. We understand that the new wooden ships Wm. H. Starbuck, Henry Villard, Astoria and Mount Washington cost Mr. Starbuck and his co-owners about \$55 per ton ready for sea, and this is about as low a figure as the best Maine builders are willing to take contracts. If it costs but \$10 per ton more to build a first-class iron ship than a first-class wooden one, the iron ship is decidedly the cheaper vessel, for the average life of a wooden ship is pretty well known, whereas the life of an iron ship has never yet been ascertained. The cost of a first-class British iron sailing ship is about £12 per ton, or but a trifle less than Mr. Roach has just contracted to build one.—*N. Y. Shipping List*.

#### STOCK-RAISING.

There will be large additions to the area of alfalfa seed this year. Everybody engaged in agricultural operations proposes to exert himself to that end to the utmost. There are about 400 sections of first-class alfalfa land in this vicinity, and we hope the day is not far distant when it will be seeded and devoted to feeding live stock. This would furnish constant employment to at least 12,000 men and their disbursements alone would make of Bakersfield and Summer large and prosperous towns. There is no business more profitable than stock-raising in places adapted to the business, as this is in a remarkable degree. Stock-raising, as it already is, and will necessarily continue to be pursued here, will build up a more prosperous, if not as populous a community, as diversified farming.—*Bakersfield Californian*.

#### CALIFORNIA FRUIT IN IOWA.

The seventeenth annual meeting of the Iowa Horticultural Society will convene in the city hall to-day, and continue until Friday evening. Mr. E. H. Colkins, of Burlington, one of the most prominent fruit-growers in this State, is in the city. He has just returned from a two month's tour of the of California, where he has been in search of a collection of the fruits of that State.

These fruits, which are on exhibition at the City Hall, and which remain up to and during Friday of this week, with one exception, were grown south of the Sierra Madre Range, and came from Los Angeles, Santa Ana, Orange, and San Gabriel, in Los Angeles county, from Ombria and Riverdale in San Bernardino county, and from San Diego. The fruit consists of oranges in considerable variety; lemons, limes, Japanese persimmons, apples, and raisins.

The exception referred to, is a box of oranges grown near the foothills of the Sierra Nevada range in the great San Joaquin valley, 270 miles north of Los Angeles, and about 50 miles east from Fresno, in a section popularly considered unfit for orange culture, on account of climatic conditions being unfavorable. With commendable zeal, W. M. Williams, Esq., the popular nurseryman at Fresno City, wishing to see his section of California represented with its fruits at this meeting, took upon himself the trouble and expense of procuring a box of oranges, grown twenty miles from his home, which he presented as a part of this exhibition. We deem it proper that the public spirit manifested by Mr. Williams should have this recognition at our hands.

We learn from Mr. Colkins that the oranges brought on by him were not specially selected for exhibition, and are no better in any particular than are offered for sale daily in any quantity up to car-load lots. Indeed some of the most prominent growers felt very reluctant about sending their fruits out for such purpose before being fully mature. We therefore bespeak for these fruits which have come to us from the farther side of the continent, that their immature condition still not cause them to be mis-judged.

Neither the lemons nor limes will suffer when compared with those grown in the most favored climes of Europe. They are the equals of the best grown in Southern Spain in size, acidity, and tenderness of texture.

Mr. Colkins thinks he has samples of raisins, taken at random from the packing-houses of the growers that will not be put to the blush when placed by the side of the finest Malagas imported into this country. In this matter Californians express a willingness to have their productions judged from the basis of the finest Malagas in the land.—*Dubuque (Iowa) Times*.

#### PLANTING TEN ACRES FOR A HOME.

An experienced horticulturist writes to the *Rural Californian* as follows:

Just for home use, an acre or two should be planted to a miscellaneous assortment of best varieties of fruit trees and small fruits; I would say 50 apple trees, two-thirds water varieties; 25 pear, of varieties ripening in succession; 50 peach, commencing with the earliest and ending with the latest; 10 each of acetariae, prune, apricot, and fig; five English walnut, five Italian chestnut, ten hundred orange, five hundred lemon, two lime; one-fourth acre to blackberry, raspberry, currants, and strawberries; rooted grapes for the table, carefully selecting the best varieties; also a few dozen second for profit. I could plant the remaining eight acres as follows: Two and one-half acres to Royal and large Early apricot; two and one-fourth acres to Bartlett and Winter Nollis pear, principally Bartlett; one acre of best canning varieties of peach; one acre to French and Hungarian prunes, about equally divided, and an acre to best seeded varieties of orange and lemon, two-thirds orange.

Without entering into the argumentative merits of the above, I believe those who plant about as thus indicated, will have no cause for regret.

#### A PROSPEROUS COUNTY.

We can not see anything but a prosperous future for the industrious and intelligent farmers of this county, and especially for those who are possessed of irrigated lands. The steady and reliable market for cereals of all kinds, for corn and beans; for grapes and all kinds of fruits, fresh, dried and canned; the increasing price of beef, pork and mutton; the high price of hops, and the open market of the world for our wines and our brandy, invite the zealous efforts of the tillers of the soil to join in reaping the golden harvest. With its vast capability in the production of these articles, Fresno county must continue to increase in population and wealth and prosperity. But our farmers should diversify the farming. Every farmer on an irrigated tract can raise a couple or more acres of alfalfa, and with its product keep a few head of cows, horses and hogs. In this particular they have been very negligent.—*Fresno Republican*.

**PACIFIC**  
Business College,  
320 POST ST.  
SAN FRANCISCO.

OPPOSITE UNION SQUARE

THE LEADING

Commercial School

ON THE COAST.

LIFE SCHOLARSHIPS

—FOR—

Business Course. Only \$70.

NO VACATIONS.

Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Beautiful Location.  
Ladies Admitted.

Special Inducements Offered to Persons of Neglected Education.

Business Course.  
Academic Course.  
Commercial Course.  
Penmanship Course.  
Modern Languages.  
Photographic Course.  
Special Branches.

For Further Information call at the College Office.

No. 320 POST ST.

Or Address the Proprietors,

CHAMBERLAIN & ROBINSON.

#### FOR SALE.

Large Dwelling House and Out Buildings.

[C-51, \$2,000]

AND 40 ACRES OF

SPLENDID GRAVEL LAND.

Within a mile and a half of the town of Orange. Price, \$1,000, or \$1,416 with water stock.

MAGNIFICENT ORANGE AND RAISIN

Land; also adjacent tracts, at from \$35 to \$65 per acre, in tracts of 10 acres or 360 acres, or intermediate sizes.

This land has just been purchased at a low price, is a large body, for cash, and subdivided into twelve tracts, and is offered for sale in lots to suit, at reasonable rates, to give a quick return on the investment. Part of the land, priced at from \$35 to \$41.50 per acre, is

#### HEAVILY WOODED.

And, on account of the abundance of the winter water, can be irrigated from the Santa Ana River directly, and without the necessity of purchasing water stock, which can be had at \$11.15 per acre. The most successful Vinnyards irrigate only in winter.

#### TERMS:

One half Cash; Balance, One and Two Years; Interest, 8 per cent. per annum.

All the land is in the Rancho San Diego de Santa Ana, which extends from the mountains to the sea, cutting one half of the waters of the Santa Ana River, at the northern boundary, and containing the following subdivisions of Orange, Santa Ana, and Pluma City. The Orange tracts take the first premium wherever entered, even at the Riverside Fair. Apply to

M. L. WICKS,

86 & 87 Temple Block,

LOS ANGELES, CALIFORNIA.



## SENSIBLE ADVICE.

From the San Bernardino Times we take the following:

In the early days of California, when people came here to find their fortunes in the mines and return home to enjoy the fruits of their labors, land was very cheap. Few cared to engage in farming or fruit raising. The process of making money in that way was, for those days, too slow. Now and then some hardy pioneer, lured by the mildness of the climate, east anchor, and demonstrated that the valleys and plains which, in summer, presented so dry and barren an appearance, were most fertile and astonishingly productive. The profits from farming were good and certain. Land began to look up and has steadily, with few interruptions during dull times, been firm and on the upward tendency. We might say, truthfully, that the day for cheap lands in California, at least in localities that are at all desirable, has passed. In hunting up new homes, a great many people make the mistake of selecting localities that are far advanced, in regard to both improvements and population. If a business locality is sought after, the mistake is made in selecting a town that has already grown too large. Business is generally overdone, and property already advanced far beyond its real value. The cream has been skimmed and you are left to take the milk at fabulous prices. You are compelled to fight the cut-throat battle of competition. Or if farming or fruit raising is the occupation in question, the land has already reached a price that requires a small fortune to purchase and improve. Many are averse to pioneering it. But it is just where the mistake is made. Where a new place is selected and all the work of building up and improving is beyond the purchaser, there is every advantage in his favor. The enhancement in value of property, the increase of business and the many chances and means of making money outside of business, all tend to induce a man to choose a new place; and especially if that place is surrounded by a country well watered, with thousands of acres of the best of soil, where every feature of the country is inviting, where every prospect is most promising. Just such a place is to be found in our own beautiful valley.

## VALUE OF MANUFACTORIES.

The following, from the Chico Enterprise, will apply equally well for many other interior towns in the State:

Some weeks ago we took occasion to urge upon our readers the necessity of encouraging parties from abroad in starting manufacturing industries among us. We showed the advantages that follow such communities in the increase of skilled labor, the money put in circulation and kept among the merchants and dealers in productions both raw and manufactured, the demands for houses being followed by the increased activity in building and kindred trades, and the general utility of every legitimate local industry. It can not be disputed that Chico is admirably placed for a number of such institutions, having a splendid supply of water-power, that needs but a moderate outlay of capital to be equal to any demand. The agricultural resources of the surrounding country have been proven superior to many portions of the State, and until some other means of employing both labor and capital are found, the growth of our town will be, in a great measure, retarded. Agriculture alone never can make a flourishing community, but combined with legitimate manufacturing industries, is almost certain to succeed. We hope our citizens will be alive to their interests, and strive to get some enterprising men with capital to come here and start in business.

## A FRIEND TO THE ORANGE TREE.

The subjoined article, taken from the Guardian, a Florida paper, will be of interest to those of our orchardists whose orange trees are infested by the scale bug:

We find that the troublesome scale insect that has proven so destructive to orange trees has an enemy, in a very small, wingless bug, of an ugly dirty color, similar to that of the scale insect, covered with minute prickles all over, and when looked at through a magnifying-glass resembles a cocklebur when it is dried up from old age. They begin their work at the base of the tree, and move along slowly like ducks or geese, until they mow off every particle of the scale, and then the tree is perfectly clean and smooth, as if it had been scrubbed. Before we found out the "mission" of these little bugs we went about destroying them by "drowns," feeling that we were getting rid of an orange pest, until we were shown a couple of trees in Capt. Prosen's yard that had been thoroughly cleaned by the "mission bugs," for we do not know a better name for them.

## A CALIFORNIA HORSE FARM.

Ex-Governor Leland Stanford's breeding farm, for horses, at Palo Alto, is one of the most complete establishments of the kind in the world. Of the 1,700 acres in the place 100 are occupied by the stables, barns, and small paddocks. The buildings, at the foot of a gentle rise of ground, make a small city by themselves, inhabited by a population of nearly 500, who return hither from their business on the pastures and race-tracks, and have 200 persons employed in their domestic service. The spacious barns are uniformly floored and ceiled up with redwood—a handsome material, which resembles cedar in effect. They are strewn with the freshest straw, and kept as neat as the most unexceptional drawing-rooms.

Serious from the stock here raised, which represent the best thoroughbred and trotting strains in the country, are likely to be a most important influence in improving the breed of horses throughout the Pacific Coast. It was here that curious experiments were conducted, at the expense of Governor Stanford, for arriv-

ing a mile trot to 2:25 1/4. Last year Bonita, a two-year-old filly from Palo Alto, cut the record down to 3:23 3/4; and later, at the same trotting exhibition, Wildflower, another two-year-old, from the same farm, made the mile in 2:21; and Hinda Rose, a yearling filly, on the same day, added to the fame of the farm, by cutting down the yearling record to 2:36 1/2. It is asserted that there are colts on the farm which can do even better.—Harper's Magazine.

## APPLE SHIPMENTS.

The export of apples is slowly but constantly increasing, both to the Territories and to foreign ports. We now see by a Los Angeles exchange that nine carloads have already gone to Arizona, and more are to follow. We cannot but look upon apple-growing as one of the most promising lines of fruit-production, and whoever has land and location suitable for the production of good-keeping winter apples should not be led away by the fever for other fruits, which are just now the favorites. Plant but a few varieties which are known to succeed well



CHINESE MERCHANT, SAN FRANCISCO.

ing at a better understanding of the speed of horses, by photographing them in rapid motion. The photographer, Maybridge, of San Francisco, succeeded, by an ingenious arrangement of electrical wires, communicating, at the touch of the animals, with cameras already prepared, in securing twelve distinct views of the different stages of a single stride. The attitudes are of the most unexpected and curious sort, some of them highly comic.

Great pains are taken in the raising and training of the young colts. From the time of foaling they are handled gently and constantly, and are made as familiar with the touch of harness as they are with that of human hands. As a natural consequence, they are perfectly tame, gentle, and even affectionate, and never need breaking. The effect of this system of training has been apparent in the performances of some of the colts which have been publicly speeded against time. The first notable exhibition of speed by a Palo Alto colt was made on the Bay District Association track at San Francisco in 1880, when the two-year-old colt Fred Crocker lowered the record for a one-

mile in the region and sell well in the market. Keep a constant lookout to keep the noxious insects in check, and, our word for it, a good-bearing apple orchard will be as comfortable a property as one can desire. But don't plant in the wrong place, and don't neglect the trees—either course will lead to disappointment.—Rural Press.

## THE PHYLLOXERA.

The Los Angeles Express says: While the phylloxera may trouble vineyards in parts of the State where irrigation is not used, Los Angeles county is safe from the pest. Irrigation, as practiced here, is a sure preventive, and should any of the vine-destroyers be introduced, cold water will "get away" with them. With the failure of the vineyards in France, it would seem as if our success as a grape and wine country was assured. With a soil that will, under ordinary cultivation, produce nine tons of Mission grapes to the acre, we need not fear competition. There is no soil in the world equal to ours, and no climate that is better.

## FISH FARMING.

There are but few persons who realize how much can be made by "fish farming." A few acres of ground, an artesian well and a few good fish, and one has, in a short time, a business that he can rely on. While traveling in Contra Costa county, we made the acquaintance of Mr. C. Dickenson, who for several years has devoted his time and attention to raising fish. Mr. Dickenson has a small farm of about twenty acres, near the town of Concord. About four years ago he made up his mind to experiment a little with the raising of fish. The first step was to sink an artesian well, at no very great expense, and then dig out and arrange floodgates to two or three pounds. The next was to stock these ponds. The fish that he selected was the European or German carp. As he could not obtain any of this species in this country at the time, that were fit for breeding purpose, he sent to Germany, and after much trouble and expense, succeeded in introducing to the waters of his ponds about eight fish that averaged about five inches in length. This was four years ago. Mr. Dickenson has increased the size and number of his ponds; he now has five ponds that average 60 feet square, and these five ponds contain about 6,000 carp, that run from three-fourths of a pound to fifteen pounds in weight. He has also stocked the three ponds at Kimball's Island, near Antioch; these small bodies of water contain about 3,000 fish. Mr. Dickenson says that the cost of keeping these fish is very small; what a dog would eat will feed a large number of fish. The breeding ponds ought to be shallow—not more than twelve to fourteen inches deep—with sloping banks and mud bottoms. Carp require a mud bottom in order to do well, and many persons suppose that these fish are not fit to eat as they taste of the mud, but this objection is easily overcome by putting the fish into a small pond or tank with a gravel bottom and running water a few days before putting on the table. By this means the muddy or earthy flavor entirely disappears, and a very fine flavored fish is had, the best size for table use is about two and one-half pounds; those weighing about twelve or fifteen pounds, though good eating, are rather coarse of grain.—S. F. Breeder and Sportman.

## SILVER ORE.

Beyond any sort of doubt there is a large silver-bearing belt a few miles to the north of us. Crude tests by various persons, at different localities, clearly establish this fact. But whether it exists in paying quantities or not remains to be seen, and the near future promises to practically demonstrate this point. Hon. Thomas Wren, of Eureka, Nevada, a well known capitalist, together with W. M. Keefe and D. H. Watson, have been engaged in developing a property on the North Side about two miles south of Garden Valley (old Jobstown), which has now a most promising appearance. They are opening two separate lodes, the General Mead and General Grant. On the General Mead a shaft has been sunk to the depth of 34 feet, at which point an analysis of the ore shows \$4 in gold and \$7 in silver, and ten to fifteen per cent. copper. A tunnel has been started to tap this ledge at a depth of 100 feet. The General Grant is an immense ledge, gold-bearing, upon which a shaft has been sunk 30 feet, where a cross-cut shows a vein 30 feet wide. Of course this is not high-grade ore, but it is claimed that it prospects all the way through. We were well pleased at the brightening prospects of Keefe and Watson, and hope they may both realize ample fortunes as a solace in their declining years.—El Dorado Republican.

## LAND SALES IN BUTTE.

The Oroville Mercury says: In our notice, recently, of the land sales in Hamilton township, we omitted to mention 240 acres near Biggs, sold by the Bank of China to Emory Busholt for \$35 per acre; a tract of the Spring Valley land, containing about 27,000 acres, six miles north of Biggs, for \$75,000; a tract of 210 acres sold by the Capital Savings Bank of Sacramento to John Fisher, for \$25 per acre; a tract of 610 acres of Spring Valley land, near Biggs, to H. Chou for \$25 per acre; a tract of 160 acres by Henry Porten (former private); a tract of 340 acres by the Spring Valley Company to Fred. Nidermann, for \$25 per acre, making the total of recent sales \$166,300, instead of \$40,000, as reported last week.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 320 Sansome St., Halleck Building.

ISSUED MONTHLY

Terms.....\$2 per Annum.

SAN FRANCISCO.....FEBRUARY, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come and settle in California.

## TABLE OF CONTENTS:

**First Page.**—Olive Culture in California.  
**Second Page.**—Olive Culture in California, Continued.  
**Third Page.**—San Mateo County.  
**Fourth Page.**—Some Artistic Wells.—Red Snow.—Homes for the Immigrants.—Large California Estates.  
**Fifth Page.**—Martin County.  
**Sixth Page.**—Facts for Settlers.—A Grand Irrigation Scheme.—Nevada County, California.—Cost of Building American Ships.—California Fruits in Town.—Planting ten Acres for a Home.—A Prosperous County.  
**Seventh Page.**—Some Advice.—Value of Manufactures.—A Friend to the Orange Tree.—A California Horse Farm.—Apple Shipments.—Fish Farming.—Silver Ore.  
**Eighth Page.**—One of California's Chief Recommendations.—California's Product and Trade in 1882.—Highly Gratifying.—The Forestry Congress.  
**Ninth Page.**—The Mission of the 'Gers.—Water Supply.—Trees, Grains, Flowers, and Fruits.  
**Tenth Page.**—Our Walnut Crop.—The Raisin Industry.—Eliphas for 1883.—The place for a Home.—Farmers' Outlook.—Cheap Mountain Lands.  
**Eleventh Page.**—General Manager A. N. Towne and the Railroad Commissioners.  
**Twelfth Page.**—General Manager A. N. Towne and the Railroad Commissioners, Continued.  
**Thirteenth Page.**—The Advantages to Immigrants.—A Rapidly-Growing Town.—A Mammoth Oak.—Wood Growing.—No Phylloxera.—Apricots for Profit.  
**Fourteenth Page.**—Santa Clara Wine Belt.—Fruit in California.—A Tribute to Farmers.—Raisin Making.

## OLIVE CULTURE.

We reproduce the article on olive culture, by the late B. B. REDDING; and for two reasons: First, because it is one of the most instructive papers on that subject that can be found. Second, because we have had so many requests from subscribers for a copy of the paper in which it was published, with which we could not comply, the edition, long since, having been exhausted.

## PERSONAL.

H. P. STANWOOD, Esq., leaves, in a few days, for the City of New York, where he will fill the position of General Agent of the California Fast Freight Line. Mr. Stanwood leaves, in this city, a large circle of warm friends, whose good wishes he takes with him to his new position.

## WELCOME BACK.

P. G. BEAM, Esq., after an absence of four years, has returned to the city, and has taken charge, as General Agent, of the business of the Chicago, Burlington, and Quincy Railroad Company. Mr. Beam is a gentleman who is well known in San Francisco, and has a host of old friends, who give him a hearty welcome back to old business associations.

## PETALUMA LAND AND REAL ESTATE AGENCY.

The firm of Messrs. Geo. C. Young & Co., in Petaluma, does a general real estate business. They have facilities for furnishing to immigrants desirable small tracts of land, suitable for all kinds of fruits, vines, etc. They will sell such lands as cheap as they can be purchased from the owners themselves. Title in all cases perfect, and terms made easy. On application they will furnish printed lists with descriptions. They have the finest vegetable and grain lands to be found in the State.

## A DESIRABLE SECTION.

We learn from our exchanges and correspondents that some of the southern counties are rapidly filling up with elegant homes, by wealthy people, whose delicate health cannot stand the rigors and changeable character of the climate of some of the Atlantic States. They find the climate of California far preferable to either Florida or France.

## ONE OF CALIFORNIA'S CHIEF RECOMMENDATIONS.

It has been said by many that our climate is more valuable than our soil, as highly as the latter is prized. And this statement is probably true. As an illustration: If the States of Iowa and Minnesota had California's climate, their lands, that range from five dollars to sixty dollars per acre, and which are acknowledged to be as rich and productive as can be found on this continent, and perhaps in the world, would become many times as valuable as they are now. A distinguished traveler recently said, in the course of a lecture, that our climate is an insurance against tornadoes, grasshoppers, mad dogs, lightning, sunstroke, and sweeping epidemics. And he might have added, very appropriately, that it is also an insurance upon live stock, and against the hardships and expense of an inclement winter. In fact, climate is one of the main sources from which our prosperity flows, and is to continue to flow. Our climate makes cheap homes, for buildings can be constructed that will answer every purpose, for a much smaller sum of money than in colder climates. There is no doubt but our vast area of territory, with its very desirable climate and productive soil, will attract emigration, which has not yet begun to flow. The wealthy will come for the indulgence of climate and physical comfort, and invalids for their health. One of the charms of our climate is, that it is so happily tempered, between the extremes of heat and cold, as to stimulate, without overpowering, the human frame. There are in our State, more days in the year on which a man can work with comfort, outdoors, than in almost any other country.

If there be any residents of California who are discontented with their lot, or who sigh for a return East, to their former homes, let them revisit their places of birth or early residence, if they would become disenchanted of their recollections. Let them spend in New York a drizzling spring, a month in burning summer, a period in cold and blustering autumn, or endure the rigors of a dreadful winter, and we think they will return to California, thinking it God's best country. Everybody should go East, upon a visit, for it is a sure cure for grumbling and creaking against California.

We, who have resided for years in California, can hardly realize the extreme cold, the great depth of snow, the terrible storms, cutting off communication for days, and sometimes for more than a week. With everything dressed in green, and flowers blooming around us here, we do not realize how terrible the winters are east of the Rocky Mountains—not even when we read the particulars in the public press. While everything is buried in huge snowdrifts at the East, in the same latitude with California, here farmers are plowing and putting in grain, and early-sown crops are growing luxuriantly. "Why," in the language of another, "will people choose to live in a climate where it requires six months' labor during spring and summer, to keep them the other six months of sterile winter, when a great empire of God's country lies within six or seven days' ride? A great empire flowing with milk, and honey, and wine, fragrant with orange groves." With the same amount of labor expended upon the sterile farms of New England, a family could make an earthly Paradise of a farm in California; and, above all, escape the terrible winters of the Atlantic seaboard.

It is gratifying to learn that California is becoming both a winter and summer resort, for a large class of people, who are only desirous of stopping a few months. Such sojourners become attached to the State, and many of them settle here permanently. This class of people are very valuable, for the reason that they are well supplied with means, which enables them to select localities that suit them best, after looking through the State. Several of the large hotels of San Francisco and the interior have many of these people from abroad, as guests, who are spending the winter here. And it is a safe calculation to make that two-thirds of them will, after returning to their homes, conclude to settle up their affairs, and come back, and make permanent homes in the State which they have learned to love so well during their brief sojourn in it. This has been the case in the past, and we now in reason why temporary sojourners will not continue to pursue the same course. To our mind, there are sufficient reasons why they should return here. As a general rule, the class that comes to Cal-

ifornia, on a tour of observation, is composed of men possessed of great foresight and sagacity. They readily observe that there is more prosperity and more rapid development of the resources of our State, in proportion to the number of inhabitants, than can be found elsewhere. Consequently, it is very natural for such men who have traveled in many lands, to arrive at the conclusion that there is no other community which will compare with the Golden State, in point of climate, richness of soil, and natural advantages for great business enterprises. In our judgment, there is no other State that holds out so many inducements to immigrants with some means, strong health, and willing hands.

## CALIFORNIA PRODUCTS AND TRADE IN 1882.

The following, taken from the *Commercial Herald's* annual trade review, shows a remarkable exhibit, and attests the growth and prosperity of California:

California production of wheat in 1882, 32,000,000 bushels; wheat and flour exports in 1882, 21,635,906 cents; wheat and flour exports for 26 years, 168,131,980 cents; domestic exports by sea for last twelve years—wheat, wool, wine, quicksilver, etc.; \$317,186,395; barley crop of California in 1882, 9,000,000 bushels; sugar imports for 1882, 106,445,600 pounds; California beet sugar product in 1882, 1,000,000 pounds; imports of foreign sugars for last thirteen years, 904,901,706 pounds; coffee imports for 1882, 21,719,912 pounds; rice imports for 1882, 51,337,341 pounds; tea imports for 1882, 24,170,616 pounds; gold and silver yield in 1882, \$80,500,000; gold product of the Pacific Coast since 1848, \$2,016,665,000; silver product of the States and Territories west of the Missouri river since 1858, \$579,891,000; combined gold and silver product of the Pacific Slope since 1848, \$2,596,556,000; gold and silver exports in 26 years, \$950,201,216; coinage in San Francisco Mint in 1882, \$37,215,000; coinage of Mint from 1851 to December 31, 1882, \$709,128,750; merchandise export values by sea in 1882, \$55,732,428; combined exports of merchandise and treasure (exclusive of merchandise by railroad) in 1882, \$66,135,732; federal revenue at the port of San Francisco in 1882, \$13,143,553; lumber receipts at this port in 1882, 264,028,814 feet; domestic coals received in 23 years, 4,754,700 tons; wool clip in 1882, 40,000,000 pounds; product of wine for 1882, 10,000,000 gallons; tonnage movement of the Central Pacific Railroad in 1882, 5,027,733,000 pounds; freight movement of the Southern Pacific Railroad (Northern Division) in 1882, 571,835,229 pounds; quicksilver product in California in 1882, 50,820 bushels; value of manufactures in San Francisco in 1882, \$100,000,000; sale of real estate in San Francisco in 1882, \$15,127,750; increase in immigration in 1882, 39,529 souls; banking capital of the State, \$175,000,000.

## HIGHLY GRATIFYING.

We are gratified, beyond measure, to learn, through the press of the State, and other sources, that there is a general disposition to receive the newly-arrived immigrants favorably, by aiding them in obtaining farming lands, and getting employment. We also note with satisfaction, that, while a hearty invitation is being extended to immigrants, they are given plainly to understand that thrift and industry are the only efficient guarantees for success.

Active steps have been taken by lending citizens, in several localities, to supply immigrants with all needed information, on their arrival. County associations have been formed for this purpose. It is a matter of general congratulation that a large percentage of the new-comers are of the most desirable class, and are possessed of means to purchase property; and the benefits to accrue, both to them and the State, from their settlement among us, are incalculable. To direct these people to suitable localities, where lands, within the reach of their available means, may be secured, and where enterprises to which they are adapted await their energy, is the work to which those who are acquainted, should apply themselves. As it is the mission of *The Resources* to truthfully publish the facilities and advantages offered to settlers by every section of the State, we think all who peruse its columns will readily find locations where they can engage in the kind of business or occupation that will best suit them.

## THE FORESTRY CONGRESS.

The recent Forestry Congress, held at Cincinnati, Ohio, was attended by many men, who have given much attention to the subject. From Eastern journals we learn that President Loring, on taking the chair, delivered a well-prepared address. After giving historical sketches of ornamental tree planting, landscape gardening, and the history of remarkable trees, telling of their significance and their value, he concluded as follows:

"I trust, therefore, that to this and all other associations dedicated to the work of preserving and restoring our vast forest wealth, and of beautifying the earth on which we tread, the people of this continent will extend a grateful heart and a helping hand. In conclusion, let me urge upon this association the most careful consideration of the topics before it—the use of forests; the influences, injurious and beneficial, of forests; the educational means by which we may become acquainted with forestry work; to what extent can the land-owner enter profitably upon the business of tree-planting and forest culture? What legislation can the States best adopt for the increase and preservation of their forests? How shall the General Government provide for the planting of forests on its public lands? What is the precise extent of forest waste? What is the comparative value of various timber trees? How shall we secure wind breaks on the prairies? By what chemical process can we preserve our timber used in building and fencing? And what forest trees are best adapted to various localities? These are questions which should be answered as definitely as possible. They are questions which the American people are anxious to have answered, and before which all discussion of foreign legislation, all consideration of the value of wood products, all statistics of trade, all study of land tenure, sink into insignificance. I trust the deliberations of this convention will point the way by which these problems can be solved, and by which our vast forest wealth will be economically preserved, and profitably used."

The *New York Herald*, in commenting on the above, says:

The rapidity with which our woods and forests are disappearing is alarming. In the wondrous development of the country very heavy drafts are made on our timber production, and the consumption is far in excess of the natural supply, or what must be the supply of the future. The statisticians who have turned their attention to the question, assure us that the comparatively trifling industry of the making of shoe pegs alone requires 100,000 cords of soft maple; lucifer matches demand 300,000 cubic feet of pine; laths, hoot trees, and tool handles call for 1,000,000 cords of birch, while the burning of bricks consumes 3,000,000 cords of wood, of various kinds; 300,000 new telegraph poles are erected annually, and in addition to all this there are houses to be built and railroad ties to be laid. The question is a mere maternal point of view is, therefore, of prime importance. If the cutting down of trees is the rule and the planting the exception, the sooner so great an error is rectified the better.

## A PRODUCTIVE COUNTRY.

We not unfrequently receive letters from the East, from parties who contemplate coming to our State, in which they ask what sections of it are the most productive. Now, we cannot undertake to answer, in detail, such questions. Our journal gives, in each number, a reliable account of the climate and productive capacity of the soil of every locality, compiled from our exchanges, in their respective localities. Consequently, our correspondents, after reading *The Resources* through, have as much information as we have, concerning the State; and they have the same means of judging where the best portions of it are to be found. We can only say that California is a wonderful State adapted to the cultivation of almost anything that will grow in any climate or country; and the greatest marvel to strangers, after visiting it, is that it is not already filled up, to the extent of its capacity, with settlers. But, when it becomes better known in the East and Europe, it will rapidly do so with a desirable class of people.

## VINEYARDS.

The acreage of vineyards in San Bernardino county is being largely increased.



## THE MISSION OF THE '49ERS.

[WRITTEN FOR THE RESOURCES OF CALIFORNIA.]

Forty years ago but little or scarcely anything was known of the great region lying between the Russian possession and Gulf of Mexico, north and south, and from the Missouri river and Pacific Ocean, east and west.

Lewis and Clarke had followed the Columbia, from its source to its mouth, and once in a great while a trading ship called in at the village of Yerba Buena, on the bay of San Francisco, while the larger portion of the section I have alluded to, was designated on the map as the Great Unexplored Region.

About this time, Joe Smith and his brother, Hiram, discovered, or at least pretended to have discovered, the *Silver Plates* the inscription on which formed the substance of the *Book of Mormon*, and basis of that religion.

The new doctrine found many adherents, enabling the Smiths to erect, soon after, the Great Mormon Temple at Nauvoo, which was supposed to be, in many respects, a fac-simile of that built ages before by King Solomon.

The people of Illinois, however, could not endure Mormonism and, rising in their majesty, drove the whole sect out of the State, shooting Joe and Hiram, as they were attempting to escape through a window of the temple, and burning that edifice, if I am not mistaken, to ashes.

The next stand was made in Missouri; but the doctrine of from two to twenty wives for each man was too strong a dose for the average citizen of that State, and they were told in homely, but very emphatic frontier language, "to git up and git," which they did at once, crossing the border in short order, and fleeing to Salt Lake, firmly believing they were so far removed from civilization that their troubles were at an end, and from henceforth they could enjoy the pleasures of polygamy free of interference from the outside world.

Just about the time they reached their destination, the war between the United States and Mexico broke out. It lasted two years, resulting in the acquisition of California—which this country gained, first by conquest, and afterwards by absolute purchase.

Scarcely had the treaty of peace been ratified, and the money paid over, when Marshall made his great discovery of gold, in the tail race of Sutter's Mill, at what is now known as Coloma, on the south fork of the American river, in El Dorado county. The news spread like wildfire, the inhabitants then living in California leaving everything behind, and rushing headlong to the "diggings."

In due time the news reached the States east of the Missouri river, which was followed by an excitement that completely overshadowed everything else; the gold mines becoming the one absorbing topic, on all occasions, and in every place; nothing like it ever having been known before.

Companies were formed, ships placed on the route, and during the first five months of 1849, 150,000 of the most energetic young men that ever existed started for the new El Dorado, some by steamer, others *à la* Cape Horn, and the larger number by way of the plains, all reaching here by the end of the year.

To my mind, these were the men chosen by Almighty God for the express purpose of discovering, and making known to the world, the mineral resources of the vast section extending from the Missouri river to the Pacific ocean, east and west, and from Alaska and the Russian possessions to Mexico, north and south.

Having arrived in California, nothing could stop their progress. With no knowledge of the country, and no capital, except their own energy, the most stupendous enterprises were undertaken, and never before had such grand activity been witnessed, the actors seeming to be inspired by something far above mortal spirit. Rivers were drained, in order to reach their golden treasures, and shafts were sunk through the solid rock 1,000 feet. Tunnels were driven into the very bowels of the mountains, and roads cut out of the almost perpendicular sides of mighty precipices. Chasms were bridged, and trees twenty feet in diameter cut down, and made to vanish like chaff before the wind; this peerless body of men becoming an army of prospectors that penetrated every nook and corner in California, discovering gold in every direction and then crossing the Sierras, holding up to view the wonderful vein of silver, known as the great Comstock Lode.

Since then they have traversed the whole section I have described, prospecting, discovering,

and opening up the seemingly unlimited mineral deposits of this great portion of the West and continent.

It is a common thing, now days, for people to speak sneeringly of the '49ers. Scarcely, under any circumstances, could more ungrateful words be uttered. Most of them have passed away, and, in many cases, their bones lie bleaching on the hill tops, and in the valleys of the localities they sought to develop.

They toiled and spent their lives that the millions, who came after them, might reap; and like all such pure, unselfish natures, scarcely any of them ever secured so much as a mere pittance for themselves; and the historian of the future, will surely place them in the same category with the immortal band which landed on Plymouth Rock in 1620.

California was then an unknown country, in the strictest sense of the word, and if one of them had died, and immediately found himself the inhabitant of another material sphere, the difference in the two situations could not have been more striking, than that between this State and the section from which he had emigrated.

Everything was an experiment, and the '49er had to bear the whole brunt of the battle; it has taken all the years that have intervened since then to discover what we now know of the mighty resources, peculiarities and great possibilities of this brightest star in the grand constellation of states which form the great American Republic.

The immigrant who comes here now takes no chances whatever. If he wishes to plant a vineyard he can determine, at once, just where to locate, the kind of land to select, and most desirable varieties of vine to set out. Should he desire an orchard, the same remarks are equally applicable. Every problem has been solved; and what to raise, where to raise it, how to sell, where to sell it, what to ship, how, where, and when to ship—all are perfectly understood, and the '49ers are the men to whom we are indebted for this knowledge, which has cost untold millions.

Till within a very few years, all our principal industries have been failures, or at least problematical, and immense fortunes have been sunk in experimenting, getting them on a paying basis, and bringing California productions to the high standard they have attained.

I firmly believe that the "hand of God" is visible in all this. Nothing but boundless wisdom could have conceived such a plan, and nothing less could have accomplished such mighty results. Had the Comstock Lode been discovered previous to the gold of California, it could not have been worked, as there were no means of transporting supplies and machinery over the mountain regions and trackless wastes between it and the East.

No sooner, however, had the fact been clearly demonstrated that it would pay, than one of the finest mountain roads ever constructed, in any age of the world, was built across the Sierras, from Placerville to Virginia City, over which the heaviest ten-mule team could pass, and at the same time, if necessary, the finest Concord coach, hack or buggy; while the foundries and workshops of San Francisco were fully able to furnish every particle of machinery that was needed, thus rendering the working of it a comparatively easy matter.

The finding, or alleged finding, of the silver plates, by Joe and Hiram Smith, was the commencement of this great plan, the Mormons unwittingly establishing a half-way house at Salt Lake city, for the great immigration of 1849. The Mexican war was the next factor through which we acquired California. Then came the gold discovery of Marshall, at Sutter's Mill, which completely revolutionized the commercial world, and formed a new era in American civilization, at the same time being the Almighty's method of producing the army of prospectors, who were destined to become His agents for the development of the great mineral region of the western portion of North America. To my mind they were fully as much so as were the twelve Apostles, and whoever admits Divine agency in the one case, must do the same in the other, or else be guilty of great inconsistency. Then followed the vast immigration of '49, which, as I have already stated, was composed of the most splendid body of men the world had ever known, and, but for whose boundless, superhuman energy, the Pacific Slope would have remained, to this day, a comparatively unknown country, and the success of the Union arms, in the great war, been

very questionable, as it probably could not have been carried to a successful issue but for the gold from the mines of California.

Finally, view the whole subject as we may, twist and turn it in every conceivable manner, and still the "hand of Almighty God" is plainly visible, and in the not far distant future, when the region I have described shall have become a mighty empire, the State of California attained to a population of ten million people, this fair city, the largest and proudest in all the world, stretching over the peninsula as far as San Jose, the unprejudiced historian of that period will sum the whole matter impartially up, and then will the whole subject be viewed in its true light, the merits of the noble-hearted Pioneers recognized, the mission of the '49ers fully appreciated, and their sacred memory be revered throughout all coming generations.

## WATER SUPPLY.

EDITOR RESOURCES OF CALIFORNIA: Dear Sir—Having just returned from repeated trips among what I term the absolute resources of California, my mind is more than ever impressed with the idea that water will always occupy a predominant position. Any movement or action that shall tend to the irrigation of lands, now almost worthless, and give impetus to our vine and fruit culture, and to the lands a value of from one to three hundred per acre, should be encouraged, and adding, thereby, to our future wealth as a State. The above has been called forth from several projects now in progress of development.

Not only is the irrigation of lands attracting the attention of capitalists, but equally that of providing our rapidly growing cities with pure mountain water for all domestic purposes. Some of these projects have a combinative purpose, while those who provide our cities with pure mountain water are necessarily distinct, as their water should be of the purest quality of granite strained waters, while the water for irrigation, carrying alluvial silt in suspension, can be taken from the several streams that seem to have been provided by an All-wise Providence for the especial purposes for which we deem them intended. We have become acquainted with several of these projects, ranging from Pitt river to Merced; but the most notable are those now in active progress, with capital behind them, to render them an almost assured success. Among the prominent ones under consideration, is to provide the foothills of Butte county with water for irrigation and other purposes, which will make that county equal to the vineyards of Bordeaux, France. Another to furnish Stockton, Oakland, San Jose and other cities with the largest amount of pure granite strained water that can be obtained on this coast. As progressive movement is being made with the latter, we will deal with that first.

Some time since, a Water Commission was organized by legislative action to inspect the different sources that might provide a sufficient supply of pure water for the City of San Francisco, the watershed of the Spring Valley Water Company having proved scarcely adequate for even the present supply of this rapidly growing city in dry seasons. It is remarkable, that while every other system of water supply was canvassed, the Tuolumne river, furnishing a supply as below indicated (owed by Mr. J. G. Divoll and Mr. Wm. G. Long, who have expended twenty to twenty-five thousand dollars in improvements of their rights) and being the nearest available supply, should have been overlooked, and not reported upon or examined by the Water Commissioners appointed by the State.

It is probable that their attention was not called to the fact, and they were ignorant of the further fact that the immense water-sheds, of 728 square miles, in an entirely granitic formation, consisted of a series of lakes underlying the "glaciers" lying westerly and northwesterly of Mounts Dana, Parker, and Whitney, and northerly of the Yosemite domes, which were an everlasting fountain, from which pure, fresh water would flow, as long as time lasts. It is a palpable fact that they did not enter into the consideration of the Commissioners, else they would not have arrived at the conclusion that no real amount of clear water, amounting to a continuous flow per diem, could compete with the 13,000,000 or 16,000,000 gallons per day, (supposed to be the extreme flow of the Spring Valley Company), was available within the power of the city to obtain, for the consideration asked, far the above limited supply.

The facts are, that a reconnaissance made by J. P. Dart, Civil Engineer, (Mr. Divoll's engineer), on the dryest day of the year 1882, proved the amount of flow at Armstrong's Bridge, the head of the ditch and pipe of the Tuolumne, Stockton, and Oakland Water Company, to be 81,388,800 gallons each 24 hours by the river supply alone, in strange contrast with the Spring Valley Water Company. In addition to the above, one of the many available lakes, under their water-shed, Lake Elmore, has a raised dam of 38 feet at the outlet—the lake being from one and one-half to one and three-fourths miles in length, with one-half to three-fourths of a mile of

width, with a maximum depth of 300 feet—would withhold an amount of pure water, at an elevation of 4,800 feet, equal to 6,902,603,712 gallons, or 61,000,000 gallons daily flow, for 108 days (covering the extreme drought of any season), which, added to the main flow in the dryest day, would make an equivalent of 135,000,000 gallons each day of our dryest year. The amount of reserve above estimated, viz.: 61,000,000 per day, for 108 days, is estimated by the engineer-in-chief, Mr. J. P. Dart, as about one-tenth of the actual reserve capacity of the water-shed, with its numerous lakes controlled by the above owners. Looking at these facts, it will seem strange to those interested in the pure water supply of California, that these facts should have been so long withheld. But when we stop to consider the vast amount of brain labor and work that must be brought to bear to bring into line, and utilize, by capital, those vast "resources," we may be able to overlook the short-sighted policy that has hitherto ruled, and rather congratulate ourselves that at last a system of capital, governed by "broad-gauge" men, will come in to open up these water reserves to our rapidly-increasing immigration. All the rivers first indicated in this article, are susceptible of utilization for vinicultural or fruit purposes, and the thousands of acres now unutilized will yet be able, with even the soiled waters of the rivers, to stand in and individually make a mark as strong as any province of France has ever made in the vine and fruit interest.

The condition of the waters so complained of by the farmers, will, in the future, become an element of wealth upon the immense amount of now unutilized adobe, or volcanic soil, with which our northern foothills are covered. It is even a question with the writer whether the acreage of the new unutilized lands, with a judicious distribution of the muddied waters spoken of, carrying, perhaps, three-eighths per cent. of alluvial silt (in suspension) will not, in the near future, challenge the wheat-growing interest of the valley in acreage; because those muddied waters, carrying the vitalizing mountain drift, will ever be, and become the strengthening element of the aforesaid adobe and volcanic soils which now lie uselessly upon our foot-hills, especially in our northern counties, where the semi-tropical fruits grow abundantly, when sufficient moisture is properly applied. This is a great question, and in the near future we may hope to see the vast amount of land, now lying comparatively idle, produce the choicest fruits of every kind, which, before the expiration of this year, can be canned in glass with perfection and purity.

Our wine, our vinicultural interests, are but in their infancy. Our horticultural and other interests are rapidly advancing. I may boldly assert that in ten years, with "broad-gauge" men at the fore, our vinicultural acreage will exceed our wheat fields. Who will then speak of the "resources" of California in derision? I fear to lengthen this article, but will come again with facts.

P. OGDON.

## TREES, GRAIN, FLOWERS AND FRUITS.

A writer in the *Chronicle*, in commenting editorially on the above heading, in a recent article, very justly says:

California has all the grains, except rice, whether they are grown in the north or south. The wheat of Russia or Egypt is improved by our soil and climate. Our lawns are filled with plants and trees brought from innumerable localities. We have lilac, snowball, hibernum, and spirea from Northern Europe; elicas and tecomans from Southern Africa; magnolias and rhododendrons from the Carolinas; camelias and azaleas from Japan; dracenas from the Sandwich Islands, palms and cistus from the East Indies; eucalyptus and other plants are trees from Australia, while other regions have been equally generous in their vegetable gifts. All the trees, grains, flowers and fruits that have been brought us, whether from the north, south, east, or west, have at once, and as if at home, taken root in our fertile fields and gardens, and reached out affectionately leaf, blade, spire, or tendril, to bathe in our sun shine and breathe our balmy air. Everything planted has grown quickly and produced lavishly fifty, a hundred, and even a thousand fold, repaying liberally the superintendence of man, and the tender care of nature.

## LAND POOR.

Though Italy possesses 57,000,000 acres of cultivable land, equal to the whole of Great Britain, and has only 3,000,000 of inhabitants dependent on agriculture alone, 3,000,000 of these are laborers, who are wretchedly poor, earning in many places less than a shilling a day, and nowhere receiving more than 8s. They have no cottages, but herd in the small towns, die rapidly of diseases produced by bad living, and are a permanent danger to the well being of the country.



## OUR WALNUT CROP.

The California Grocer, of December 28th, thus speaks of the value of the walnut crop in this State:

A few weeks since we called attention to the California almond crop, and this week we touch upon the subject of the English walnuts of California, which already occupy quite a prominent place among our State productions. We are indebted to Mr. Meade, of the firm of Geo. W. Meade & Co., of this city, for some interesting facts and statistics in regard to this nut. It is but a few years since that this coast depended principally upon Chili for its walnut supply; but at the present time so fast has the production of the walnut increased in this State, that besides supplying our entire coast and territorial trade, we have become large exporters to the Eastern cities, where our best walnuts are being received with universal favor, ranking ahead of all imported nuts, with the single exception perhaps of the Naples, and our soft-shell walnut ranking equally with that variety. The total crop of this year is estimated by Mr. Meade to approximate 650,000 pounds, as nearly as can be ascertained, divided among the following counties: Los Angeles, 400,000 pounds; San Bernardino, 100,000 pounds; Santa Barbara and Ventura, 150,000 pounds; total, 650,000 pounds. Of this quantity it is estimated that not less than 400,000 pounds have been marketed East, at an average price here of eight and one-half cents per pound. Out of this price it is believed that the producer has realized from seven and one-half to eight cents per pound, at which figures a handsome margin is visible, especially so when we take into consideration that the walnut growers of Chili on an average do not realize much if anything over two to two and one-half cents per pound net for their production. While the production of this nut is chiefly confined to the counties above named it is being yearly demonstrated that many sections of the State hitherto considered unfit for nut growing are equally as well adapted to the production of both the almond and walnut as in those sections where it is no longer an experiment. The walnut which heretofore has had the best reputation is grown at Los Nietos, in Los Angeles county, though some of the Santa Barbara and Ventura nuts this year are equally as good. Those known as Los Angeles City and San Gabriel Mission walnuts, from the fact of their running uneven in quality and brightness, and being poorly filled, do not meet with favor by the trade; but, as new orchards are coming into bearing, we may look in a few years for an improvement in this respect. With the whole country for a market, and an unlimited field in our State for their production, we look forward to the time when our walnuts, like our almonds and raisins, will drive out all foreign importations. That such a time is not very far off any intelligent observer will admit who notes the gigantic strides our State is now making.

## THE RAISIN INDUSTRY.

We have been at considerable pains to gather the figures of the raisin export of the Santa Ana valley during the season just closed, and find that, by rail and steamer *Nearport*, the shipments have been 24,886 boxes. It is probable that some few boxes remain for shipment, and the total would be easily what we said it would be early in the season 25,000 boxes. In 1881 we marketed about 16,000 boxes, the product being excellent. Much of the crop was shipped directly East, as has been the case with the present crop. The picking, curing and packing is done much better every year, more care and attention being given, and this is securing us a good reputation abroad. In time we shall equal the best product of the Malaga vineyards, even if we do not do it now. We have the soil and climate, and the prospect is good for this industry to assume huge proportions in our favored Santa Ana valley. We need never fear that the market can be glutted. The trouble will be that the demand will always exceed the supply.—*Santa Ana Herald*.

## ECLIPSES FOR 1883

In the year 1883 there will be four eclipses; two of the sun, and two of the moon.

I. A slight partial eclipse of the moon, April 22; only one digit being eclipsed anywhere. This eclipse will be visible to the Pacific Coast, Eastern Asia, Australia, and the Pacific Ocean.

II. A total eclipse of the sun, May 6, visible chiefly to the South Pacific Ocean.

III. A partial eclipse of the moon, October 11th and 16th. Visible to North and South America, and extreme western portions of Europe and Africa. To those living in this locality, the eclipse will commence about one o'clock on the morning of October 16th.

IV. An annular eclipse of the sun, October 30th. Invisible to North America, except in part to the Pacific Coast. Visible to the North Pacific Ocean, and extreme eastern edge of Asia. Beginning at San Francisco at 17 minutes to 4 o'clock P. M., the sun setting at moment of greatest partial eclipse. The Pacific Ocean will get a view of three of the above eclipses.

## THE PLACE FOR A HOME.

A man of family, that is, a man who is worthy of having in his keeping the rearing of a family, who is anxious to draw around him the practical blessings that enable men to fully enjoy the contentments of a home, can find no better place to cast the anchor of his hopes than here in Fresno county. Here he will find himself in the neighborhood of schools in which his children can acquire all the learning necessary to the requirements of a good business education, and employment sufficient for them to learn the sweet independence of honest toil. Any man who is willing and able to work can obtain a colony lot upon such terms as will enable him to pay for it out of the proceeds of the twenty acres in which he invests—for simply nothing but his labor. So sure are the first owners of these colonies that men can make money out of them in grape and fruit culture, that some of them not only sell without receiving a cent down, but, in some instances known to us, carry the purchasers of their twenty-acre lots until such time as a return comes to the purchaser either in a grape or fruit crop; the only requisite being that he spend his time in earnestly bringing his lot under good cultivation. The century would have given work to a hundred boys and girls more than presented themselves last year, and its capacity will be doubled next year. The work in fruit preserving establishments averages about five months of each year, and good wages are paid for boys and girls as well as men. The canals and ranches also employ more or less help. A man who can and will work can free himself from debt at the end of the fourth year, and be in possession of a tract of land that will produce an annual income of from \$2,000 to \$4,000. Of course, a man can do much better if he has a few hundred dollars to start with; but the thing has been done and can be done again as above stated. Almost any legitimate business undertaking will be successful here if adapted to the wants of the county. We can safely say that Fresno county presents to the man of moderate means and to the laboring man more inducements to come and found a home of his own than any other portion of the coast.—*Fresno Examiner*.

## FARMERS' OUTLOOK.

Farm prospects were never more favorable in this section at this season of the year. Grain is growing finely. The cold snap was of great benefit to it, as it gave it by the set-back a heavier root and prevented the tops from growing too fast and rank. We have had for the season nearly 11 inches of rain, and this with the almost constant fog, have kept the ground in splendid condition. The weather is now as balmy as spring, and since the last warm rains all nature has put on a broad grin. The dairy season is unusually promising. Many of the dairies in Marin county, notwithstanding the long spell of cold weather, are now averaging one pound of butter a day to the cow. Stock of all kinds is generally in better condition than usual for this season of the year. On the Laguna, in Marin county, two or three new hop fields will be planted this spring. Mrs. L. W. Walker is setting out about 20 acres, I. R. Jewell will add about 20 acres to his present field of 15 acres. Charley Martin will also put out quite a large field. Mr. Pepper and other nurserymen in this section inform us that the demand for fruit trees and vines was never so great here as it has been this season. Of many varieties, all the stock suitable for planting has been taken from the nurseries, and they haven't a tree on hand. Farmers have made no improvements on their farms the past year than any previous year since our settlement. The whole country bears the appearance of thrift and prosperity, and the general outlook in all this section could not well be more promising.—*Petaluma Courier*.

## CHEAP MOUNTAIN LANDS.

We again call attention to the cheap lands on Sonoma mountain. In the near future some of the best grapes and fruits will be grown in what is known as the warm belt on that mountain. It is above the fogs and ordinary frosts, and much of the land is peculiarly adapted for vineyard and orchards. The land is cheap, water and wood abundant and the very best, the climate fine, the scenery can not be surpassed in the Coast Range, and with a little money, backed by practical sense and industry, a man can in four years make himself independent. Land in small tracts can be purchased for from \$15 to \$30 per acre, according to location and improvements and other advantages. It is near the market, is a healthy location, and for residence and fruit purposes we think possesses some advantages over lands lower down in the valleys. These lands, in a few years, will more than double in value.—*Petaluma Courier*.

## TULE LANDS.

A tract of 2,500 acres is now being reclaimed, in the vicinity of Twelve-mile slough, San Joaquin county.

EDGE HILL  
VINEYARD, WINE CELLAR AND  
DISTILLERY,

Near St. Helena, Napa County, California.

SCHAEFFLER'S CELEBRATED VACUUM DISTILLED

SANITARY BRANDY

—AND—

Brands of Red and  
White Wines.

STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED

Burgundy, Bordeaux and  
Rhine Wines.

Orders Received and  
Promptly Attended to by

WM. SCHEFFLER,  
PROPRIETOR.

CALIFORNIA MARKET,

CALIFORNIA STREET TO PINE,

Between Montgomery and Kearny Streets.

The Leading Market of the Pacific  
Coast.

DEPOT FOR THE CHOICEST MEATS, FISH, POU-  
TRY, FRUIT, VEGETABLES, AND  
DAIRY PRODUCE.

Goods purchased in this Market need no other recom-  
mendation.

THOS. BROWN, Superintendent.

THE CALIFORNIA  
POWDER WORKS.

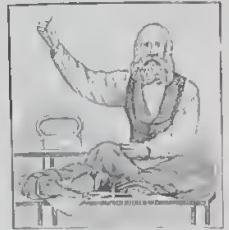
Santa Cruz Gunpowder.  
HERCULES AND MINING POWDER.  
SUPERIOR SPORTING POWDER.  
CABINET, EUREKA, QUAIL and PUCK Shooting.  
Sea & Coast, Valley Mills.  
Pacific Rifle and Pistol Powder.

ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
Kegs.  
SHOT,  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.

PRINCIPAL OFFICE,

No. 230 California Street,  
SAN FRANCISCO, CAL.

WISDOM is always on the lookout for  
chances to increase their earnings, and in  
time become wealthy; those who do not  
improve their opportunities remain in poverty. We  
boys and girls to work for us right in their own local-  
ties. Any one can do the work properly from the first  
start. The business will pay more than ten times ordi-  
nary wages. Expensive outfit furnished free. No one  
who engages falls to make money rapidly. You can do  
more work than to the work, or only spare mo-  
ments. Full information and all that is needed sent  
free. Address, Brown & Co., Portland, Maine.

NICOLL,  
THE TAILOR,  
(Branch of New York),  
PHELAN'S BUILDING,  
816 and 818  
MARKET STREET,

Cordially invites the public to visit his new  
store, where they will see the largest and  
cheapest stock of English and Foreign spe-  
cialties in Woollens for the Spring Season.  
Give us a call.

WALK RIGHT IN.  
Examine our New Styles, Prices and Qual-  
ity. Civility to all. No trouble to show  
goods. Lightest and Largest Tailoring Es-  
tablishment on the coast. Satisfaction  
guaranteed. Store lighted by Electricity.

THE FAMOUS ENGLISH  
TINSEL  
SUITINGS.

The golden threads among the green.  
Elastic colors blended in between.  
The silver threads mixed in with brown—  
All colors in wool as soft as down.

## TO ORDER:

Pants from ..... \$ 5 00  
Suits from ..... 20 00  
Overcoats from ..... 15 00  
Dress Coats from ..... 20 00  
Genuine 6x Beaver Suits  
from ..... 60 00  
Black Doeskin Pants from 7 00  
White Vests from ..... 3 00  
Fancy Vests from ..... 6 00  
English Coats for Hunting Suits

SAMPLES,  
With Instructions for Self-measurement  
with our Gazette of New Fashions.  
SENT FREE.

NICOLL, The Tailor.  
Men's Furnishing Depart-  
ment.

Also invites attention to his New Furnishing  
Department—Is the largest stock of the finest  
Eastern make

MEN'S UNDERWEAR,  
WHITE AND COLORED SHIRTS,  
CASSIMERE AND BLUE FLANNEL OVER-  
SHIRTS.

PLAIN AND FANCY HALF-HOSE,  
NECKWEAR,  
SUSPENDERS,  
HANDKERCHIEFS,  
COLLARS AND CUFFS.

NICOLL, The Tailor,  
Ready-made Department,

Have large stock of Men's, Boys' and Youth's

## READY-MADE CLOTHING

Of the Newest Patterns and Improved Styles  
of our own manufacture and guaranteed  
strength. Men's Suits from \$15. Boys' Suits  
Overcoats, Vests,  
SPECIAL ATTENTION paid to patrons  
from the country.

NICOLL, The Tailor  
PHELAN'S BUILDING,  
Market Street,  
SAN FRANCISCO.



E. J. BALDWIN'S

Pure Grape

BRANDIES AND WINES.

ATTENTION IS CALLED TO THE JUSTLY CELEBRATED PRODUCTS OF THE FAMOUS

Santa Anita Vineyard,  
San Gabriel Valley, California.

PURE OLD PORT WINE,  
Vintages of 1875, 1876, and 1877,  
Will be found very rich and choice,  
Warranted pure and of full body.

PURE OLD ANGELICA,  
Vintages of 1875 and 1876.

This is a Wine of Superior Quality, and such as has never been on the market in any country. This article SHOULD NOT be classed with the so-called Angelica Wines of this Coast, but is of a rich, rare flavor and full bodied, and NO CORDIAL can compare with it.

PURE GRAPE BRANDY,  
Manufacture of 1875 and 1876,  
Cannot be excelled, having been but a few months before the Public, it is meeting with unparalleled favor, to the exclusion of all other brands.

Special Gold Medals  
AWARDED AT THE LAST CALIFORNIA STATE FAIR, AND ALSO AT THE SAN MATEO AND SANTA CLARA DISTRICT FAIR

ALL OF THE

"BALDWIN" BRANDIES

Are Manufactured from the best selected grapes grown upon soil peculiarly adapted to fine brandies, and is always retained in private stock until over five years of age, and none offered for sale at a less age. Guaranteed free from foreign spirits or adulterations of any kind, and the identity of the brand always preserved, which is a guarantee for fine quality, flavor, and purity.

Skilled Experts, Judges of Immities, of all nations, Doctors and Scientists, at once pronounce E. J. BALDWIN'S

PURE GRAPE BRANDY  
THE PUREST AND BEST IN THE WORLD.

One of Many Testimonials:  
SAN FRANCISCO, May 23, 1881.

E. J. BALDWIN, Esq.—Dear Sir: I have great pleasure in assuring you that your Santa Anita Pure Grape Brandy is not excelled in Boquet, flavor and purity, by any brandy produced in France and, I doubt from the careful attention paid to the selection of the grapes, and the method employed in removing the fruit oil, if the equal of the same vintage, can be found anywhere. It took great pleasure in distributing the package you sent me to many friends, and afterwards as delighted as surprised that our State could boast of such a fine production.

I am, very truly, yours,  
(Signed.) A. J. BOWIE, M. D.

For Hot or Cold Purposes the "BALDWIN" BRANDY cannot be equaled; for medicinal purposes it is far ahead of any other as a stimulant, it is tonic, agreeable and healthful, and no headaches or bad effects whatever are caused by its use. This celebrated brandy is made in a new potent distill, manufactured especially for Mr. Baldwin, by a first-class chemist, which removes all impurities, and ages and mellowes the brandy wonderfully, in a short time.

For sale by all leading Druggists, Liquor Merchants, and first-class Grocers.

For Eastern and Foreign Markets, by direct letters to

E. J. BALDWIN 37 Eddy Street,  
The Baldwin Hotel,  
SAN FRANCISCO.

STOCKTON

BUSINESS COLLEGE,

Telegraph Institute

—AND—  
NORMAL SCHOOL,  
F. R. CLARKE, Principal.

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the Year. Tuition is less than one half usual rates. Excellent board \$10 per month.

COURSES OF STUDY:  
Full Business Course, Full Normal Course,  
Teacher's Course, Review Course,  
Accounting Course, Special Courses,  
Languages, Telegraphy.

The COLLEGE JOURNAL, containing full particulars, sent post paid. Address: F. R. CLARKE,  
P. O. Box 15, Stockton, Cal.

HOME MUTUAL

INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY..... 1883.

FIRE ONLY.

PRINCIPAL OFFICE:  
No. 406 California Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - 710,880 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

OFFICERS:  
J. E. DUGHTON..... President  
J. L. R. SUEPARH..... Vice President  
CHAS. H. STORY..... Secretary  
R. H. MAGILL..... General Agent.

G. P. SHERFIELD. J. PATTERSON. N. W. SPALDING



17 and 19 Fremont street,  
SAN FRANCISCO.

AGENTS FOR C. B. PAUL'S  
CELEBRATED FILES,

Planing Knives, Currier Knives, Saw

Mandrels, and Saws of Every

Description Made to Order.

PRESCOTT & ZIMMERMANN,  
PROPRIETORS OF

Queen City Market,

DEALERS IN ALL KINDS OF

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED

MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Choicest Eastern Hams, Bacon, Lard and

Foreign Sausages of all kinds.

CORNEE BEEF AND PORK FOR SALE BY

THE BARREL.

1154 1158 Market St., and 6-8 Taylor St.,  
SAN FRANCISCO.

GENERAL MANAGER A. N. TOWNE AND  
THE RAILROAD COMMISSIONERS.

The following letters, from A. N. Towne, General Manager of the Central and Southern Pacific railroads, to the State Board of Railroad Commissioners, are well worth the time required for their careful reading by the public. They are straightforward, honest, and pertinent:

SAN FRANCISCO, February 5, 1883.

Honorable Board of Railroad Commissioners—GENTLEMEN: In regard to the subject referred to, of the construction of railroads in the State of California, and the benefits derived therefrom, and agreeable to promise, I desire to say the testimony derived from experience, has led to the settled conclusion that the construction and operation of railroads confer development upon the section of country served by them.

I had supposed this to be so fully admitted as to have passed beyond the realm of controversy long ago. From what was said at the last meeting, and from the reports of the proceedings of your honorable body, it appears that this common and well-established conclusion has been questioned, and the instance depended upon to support an opposite theory, relates to the Southern Pacific Railroad system in the San Joaquin valley and the counties of Los Angeles and San Bernardino.

I understand that it is alleged that the Southern Pacific system has not promoted the creation of wealth, or the settlement of population, or the general welfare of the communities named. By this position, there is raised an issue of fact, which has induced me to institute a careful review of the evidences upon which the settled conclusions in favor of railroad building have been based.

The facts herein presented are from official sources. They are comparative statistics, determinate of conclusions, fully establishing the high economic value of railroad construction.

Your attention is most respectfully called, first, to the comparative statistic data, and, with your kind permission, I will, later on, present in the most direct manner at my command, the general considerations bearing upon this subject:

RAILROAD CONSTRUCTION.

The Tulare Valley Railroad, connecting Lathrop with Goshen, was constructed during the years 1870-1. The extensions of that line were made as follows: Goshen to Tipton, finished June, 1872; Tipton to Delano, finished June, 1873; Delano to Lerdo, finished June, 1874; Lerdo to Summer, finished 1875; Summer to Caliente, finished May, 1876; Caliente to Teacabepi, finished June, 1876; Teacabepi to Mojave, finished July, 1876; Mojave to San Fernando, finished September, 1876; San Fernando to Spedra, finished April, 1877; Spedra to San Geronimo, finished October, 1877; San Geronimo to Ludlo, finished June 1876; Ludlo to Yuma, finished June, 1877; from Goshen north to Hanford, finished December 1876; from Hanford to Huron, finished January, 1877; Los Angeles system connected with the San Francisco system September 5, 1876; road completed to the Colorado river in 1877; Yuma to El Paso opened up to traffic May, 1881, and to New Orleans February 1, 1883.

From the foregoing, it will be seen that Los Angeles was connected with San Francisco September 5, 1876. Through communication between the cities of San Francisco and Los Angeles, therefore, had been established but six years. Eastward connections, via the A. T. & S. F. R. R., affording outlets for the products of Los Angeles and San Francisco were established to Deming, March, 1881; to El Paso, with the Texas & Pacific, January 1, 1882, and to the Gulf of Mexico February 1, 1883.

Benefit to Products.

From the time of the completion of the road to Yuma, the staple products of Southern California were exported to Arizona, and, with the further extension of the road to Tucson and the New Mexican line, these products finding market in New Mexico. When the junction with the Atchison, Topeka, & Santa Fe Railroad was effected, a still broader area was opened up to the semi-tropical products of the southern portion of this State. The differences of production between different parts of the earth constitute the basis of commercial exchange between them. The fruits and garden truck of Los Angeles ripen earlier in the season than the same products in the region lying east of the Sierra Nevada range, and north of the 35th parallel.

In illustration: potatoes, tomatoes, green peas, and other garden vegetables are obtainable in Los Angeles as early as April, while these articles of food cannot be obtained north of the 35th parallel before May, and in still further northern latitudes not before June and July. The rate of transportation between Southern California and the Northwestern States affords a profitable margin for the exportation of garden vegetables, while 35,000,000 of the people of the United States reside in latitudes where the tropical and semi-tropical products of Southern California cannot be grown.

This fact will confer upon Southern California permanent and ready market for her products. Before the completion of the railroad lines connecting the southern part of our State with the States and Territories mentioned, there existed, to a limited extent, the production of fruit and wine, in the counties of Los Angeles and San Bernardino, but the completion of the railroads in question has

conferred upon that section a profitable market for lumber, through the port of Wilmington, grain and all dairy, orchard, and garden products, and has given an impetus to these industries, which has conferred wealth upon that part of the State.

Increase of Taxable Property.

That this is so is further emphasized by the increase of taxable property during the past ten years. In 1870 the tax roll of Los Angeles county showed the aggregate taxable property to be \$4,918,074. In 1882 the tax roll for that county showed the aggregate taxable property to be \$20,975,188, an increase of over 300 per cent. in twelve years. The official figures show that the larger per cent. of this increase should be credited to the past five years. The same gratifying result is obtained by a comparison of the tax roll for 1870 with that of 1882 as relates to San Bernardino county. The figures are as follows:

Taxable property in 1870..... \$1,202,462  
Taxable property in 1882..... 3,995,315

Being a gain of over 300 per cent., and as in the former case, over 60 per cent. of this gain may be credited to the period which has elapsed since the completion of the railroad system. Nor is the official exhibit less satisfactory as relates to the counties in the San Joaquin valley. San Joaquin county, the wealthiest, and most populous of the San Joaquin valley counties, contained but \$7,890,000 worth of taxable property in 1870, while the tax roll of 1882 shows \$23,114,756 within that county.

Like comparisons instituted relating to the other counties of the San Joaquin valley show like results; as, for instance, the footings of the tax roll for Stanislaus county in 1880 showed \$3,423,808. The tax roll for 1882 looks up \$10,620,719, being a gain of over 300 per cent.

The same results are obtained by a comparison of the value of the taxable property between the years 1870 and 1882 in the counties of San Bernardino, Merced, Fresno, Tulare, and Kern; and for your better information the following tabular statement, obtained from the office of the Comptroller of State, is presented. This table includes the taxable property in the counties mentioned for the years 1860, 1870 and 1882:

Counties	Tax 1860.	Tax 1870.	Tax 1882.
Los Angeles.....	\$3,050,000	\$ 6,918,074	\$10,975,188
San Bernardino.....	117,238	1,202,462	3,995,315
San Joaquin.....	4,934,100	7,890,000	28,114,756
Merced.....	1,110,000	3,292,453	6,274,800
Stanislaus.....	962,810	3,423,808	10,620,719
Fresno.....	931,000	3,219,230	8,309,091
Tulare.....	1,580,522	3,496,766	7,993,926
Kern.....	No Record	1,971,246	6,131,691
Totals.....	\$13,613,361	\$13,211,891	\$91,610,501
			31,217,891

Showing a gain in twelve years of..... \$60,397,700

One Hundred Millions of Value Created.

The entire taxable property in Los Angeles, San Bernardino, San Joaquin, Merced, Stanislaus, Fresno, Tulare and Kern counties, in 1860, aggregated but \$13,613,351, or over seven millions less than the taxable property of Los Angeles county to-day.

In other words, Los Angeles county to-day has 50 per cent. more taxable property than the entire San Joaquin valley (including San Joaquin county itself, Los Angeles and San Bernardino counties), had in the year 1860.

The aggregate taxable property of these counties in 1870 amounted to \$31,277,891, while the present aggregate value of the taxable property in the same counties foots up \$91,610,591, an increase of over 300 per cent. These counties, therefore, have gained since 1870 \$60,332,700, the increase being about double the amount of the aggregated taxable property for 1870.

That this enormous increase of wealth, this gratifying evidence of prosperity is due to the influence of railroad construction, is fully established by the well-known attendant facts. The only outlets for the products of the San Joaquin valley prior to the building of railroads was by way of the San Joaquin river to San Francisco. That river could not be profitably navigated beyond Firebaugh's Ferry. In fact the City of Stockton was practically the head of navigation upon that water-course. But the establishment of railroad communication changed the character of the industries of the country from a region devoted to grazing to the profitable pursuits of agriculture and viticulture.

The statistics of the county of Kern present no record of taxable property in the year 1860. In the year 1870 the aggregate value of taxable property in that county amounted to \$1,974,856, while in 1882 the taxable property reaches the sum of \$5,431,601, an increase of 250 per cent.

Presenting the showing made by all the counties in the San Joaquin valley in a single footing, the increase of taxable property, from 1870 to 1882, was \$10,553,765. There are in the San Joaquin valley 6,007,268 acres of land adapted to agricultural purposes. The average value of this land, prior to the railroad building, could not have exceeded \$5 per acre. At that valuation, the aggregate value of the land would be \$30,036,400. The present average value of the land exceeds \$20 per acre, or the aggregate valuation of about \$120,000,000. Thus the construction of railroad lines has created values in real estate alone amounting to about one hundred million dollars.

That these values have been conferred by the construction and operation of railroads becomes apparent when it is considered that divested of such railroad communication they would at once return



to their former valuation. These specific facts constitute a strong showing in favor of railroads, but they are reinforced by other and higher considerations, the social and intellectual value of quick communication with the great center of social and intellectual life, and the general convenience and comfort of railroad communication with all parts of the country can not be over-estimated. The cost of the supplies for the people of the San Joaquin valley has been greatly reduced. The increase of production since the construction of railroads has been very marked. The population of the San Joaquin valley has been increased by over 45,000 people, more than 15,000 buildings have been erected, villages and towns have sprung up along the line of the road, and generally the wealth has been enhanced and population greatly increased.

It should be, and is, no doubt, well known to you that fresh fruits, grown in the San Joaquin valley, and in the counties of Los Angeles and San Bernardino, are shipped to the cities of the East, and sold at a rate but little, if any, in excess of the market price obtained for them in the cities of San Francisco and Sacramento.

Early garden stuff is transported from the City of Los Angeles to Kansas City, St. Louis and Chicago, and sold in the markets of those cities at a rate scarcely in excess of the retail price for the same commodities in Los Angeles itself. The green fruit shipments from the Sacramento and San Joaquin valleys show a constantly augmented tonnage, and an unlimited market is found for them in Arizona, New Mexico, Colorado, Wyoming, as well as in the States and Territories further east. Orchard, garden and dairy products require quick as well as cheap transportation, and this requirement can be met by no other agency than the railroads.

The construction of railroads, then, has centered upon the sections of country, under consideration, unlimited markets for all the products to which they have given cheap and rapid transportation, and have placed the populations of these sections in cheap and quick communication with all parts of the world.

In all this they have conferred benefits which can not be estimated. Respectfully, yours,

A. N. TOWN, General Manager.

Manager Town's Second Letter.

SAN FRANCISCO, February 7, 1883.

Honorable Board of Railroad Commissioners—GENTLEMEN: Since our communication to you of day before yesterday some things have occurred to us which we beg you will permit us to present in this.

In the administration of your high office there are many things to be considered.

However zealous you may be to arrive at an early decision, your zeal should be well-informed and enlightened. The gravity of the situation obliges me to appeal to you for justice. You are the judges, jury and executioners. And I am sure we are not deceived in our faith that you will do nothing that will harm our properties. We will demand nothing which will not be in full accord with the rights guaranteed by the Constitution. The rates as fixed by our Company are the results of much labor, after serious consideration, and a thorough conviction that no higher rate was charged than necessary to meet the requirements of the Company.

These propositions are not inspired by personal interest. The writer has no property rights in any of these railroad corporations. He is here to develop the interests of the country, and to bring about fair returns upon the property he represents. And the welfare of the country through which the roads run, will, in the future, as in the past, alike with their owners, have full consideration.

As a proof of this, look at the internal prosperity enjoyed since the advent of the roads. All industries are encouraged, and prospering beyond any precedent. The measures adopted by our people in their policy, and the results achieved, must be obvious to every candid mind, and it can hardly be denied that the ends sought have been attained (1st) to meet necessary expenses, the requirements of the General Government, under the "Thurman Act," a small interest on the capital employed, and (2d) to reduce the rates, from time to time, by our own volition.

This we have done, from the high maximum allowed by law, to the average of two and sixteen hundredths (2.16) cents per ton per mile on freight, and three and six hundredths (3.06) cents per mile for passengers for the whole system, for the year of 1881. And we are confident that it will be below these figures for 1882.

We would ask your candid consideration to a comparison of these rates, with the rates charged by the roads of New South Wales, as per their last report, (1880) which are four and sixty hundredths (4.64) cents per ton per mile on freight, or more than double that charged by the Central Pacific and bonded lines, and but forty-four hundredths (4.44) cents per mile on passengers than was paid by the people of California. What better or further proof is wanted of the wisdom of the policy of our Company? And what better evidence of just and reasonable rates can be offered than this fact.

The Roads of New South Wales, Aggregating nearly 1,600 miles, are owned by the

people, and operated for their benefit, and from which they receive nothing in return but the service performed in the transportation of passengers and property. While, on the other hand, the Central Pacific Railroad Company is required by law to carry, free of charge, (over certain sections of its lines), officers in charge of convicts, and lunatics, articles intended for exhibition at the State Fairs etc., etc. It not only performs a service equally as valuable as the roads of New South Wales, but it pays back to the State a large amount of money, in the way of taxes, harbor dues, etc. The amount paid by the Central Pacific Railroad and leased lines for tolls (upon its own property), and harbor dues, for the year 1881, was \$43,000. The total amount of assessment of taxes was nearly \$700,000 for the State of California, to which must be added the amount disbursed for labor, fuel, material, and supplies, a very large amount of which finds its way back to the people of California, and which would probably equal the amount received for the entire service within the State.

If we do not possess your full confidence, we invite you to make a searching inquiry into these affairs, in support of what we tell you, and you will, as honorable gentlemen, admit that our position is not only tenable, but that it and our acts are just to all. During the official term of your immediate predecessors, we made many most important reductions in our rates, (substantiated by their reports), which are not seemingly fully understood or appreciated. We call your special attention to these matters, and would urge upon you the fact that we have placed to the credit of the farmers of this State many millions of dollars by cheapening rates from their farms to the consumers of their breadstuffs in Europe, all of which are matters of record with the Chamber of Commerce and Board of Trade, in this city.

Further, we have done very much to develop and enrich the State, which was referred to at length in my communication day before yesterday.

Your predecessors were absolved from further reductions, in the eyes of fair-minded men, by the great reductions made by our Company, during their term of office, and, should the four years of the future be as prosperous and encouraging as the past, we promise corresponding concessions in our rates. But, with a dry year in prospect, and all the attendant circumstances, the Company cannot, in justice to itself, at this time, further reduce its rates, and, in making this appeal to your honorable Board, we do so in full confidence, that you, in your wisdom, will do even-handed justice to this property, and even though it be the property of a corporation. To adjust the rates fairly alike to the roads and the people, as best to be borne, and to develop the business of the roads, is no easy task. Since the road was completed, nearly fourteen years ago, this work of reduction has been constant, and it has demonstrated, to men of experience, the impossibility of an equitable and fair adjustment of a tariff, without a thorough knowledge of matters entering into and forming important factors relating thereto. I respectfully commend to your attention the able discussion and testimony of Messrs. Adams, Pink, Blanchard, and Atkinson, whose opinions, by reason of the profound study given this intricate subject, should have the highest value. Shall the life study of those men of acknowledged ability be outweighed in the balance by the few days' consideration you gentlemen have given this question?

Are our rates such that thoughtful men contemplate them with deep concern as a menace to the welfare of the State?

Is there much poverty and suffering?

In what direction is the development of the State being discouraged?

In what difficulties is the country involved, from which you are called upon to extricate it in such haste?

Is the State in a perilous condition? Is there any stagnation of business? Is not the reverse the fact? From all parts of this State, assurances of a high state of prosperity are given.

There is Profitable Employment

For all who are willing to work. Wages for all labor, both skilled and unskilled, are higher than for such employments east of the Rocky Mountains. As an evidence of this general prosperity, I refer to the coin reserves, belonging to the people, and deposited in the banks of the State.

On January 1, 1883, there was standing to the credit of depositors, in the savings banks, over \$55,000,000, and in the commercial banks, July 1, 1882, over \$35,000,000—an aggregate of \$90,000,000.

This sum is sufficient, with the present comparatively low prices of material and labor, to more than duplicate all the miles of road operated by this Company during the year 1882, excluding portions of the heavy work on the mountain sections.

Your attention is also called to the balance sheet of the earnings and expenses of 1882, now before you. The aggregate dividends declared, if applied to the capital employed, of the Central Pacific Railroad and leased lines, would amount to but a penny over two per cent. No thoughtful or reasonable man will say that is too much. Any reductions in rates will necessarily bring this surplus down, and jeopardize our ability to meet interest and other expenses. None of these roads already

built were constructed, at the price of many efforts, across a country where there was no pathway marked out. They were built far in advance of settlement, and at many great sacrifices. They have all been reinforced, and many of them relaid with steel, having worn out, in many places, already two sets of iron rails. They have all been relaid with ties for a second or third time. And yet we have but a sparse population to support them, as compared with roads of the East.

In view of these conditions, I would further appeal to you for justice and protection.

Some of the measures you are proposing would operate as restraining orders, and force us to build up barriers, high and wide, to protect a property that has done so much to make this great commonwealth rich and prosperous.

Respectfully yours,

A. N. TOWN, General Manager.

#### SANTA CRUZ COUNTY.

Last week, in speaking of the increase of population that has taken place in this county during the last two years, we put the number at 500 persons among the agriculturists. This is a very low estimate. The increased vote of this county, as shown by the great registers of 1880 and 1882, is 498. This increased citizenship was not shown in the vote cast in Watsonville and Santa Cruz, and must represent at least 2,000 people, as there is, on an average, but one voter to five and a half persons. The increased population of the last two years, estimated at 2,000, must be largely on the farm, in the vineyard and setting out trees. Their presence in the hills is what has set men to grubbing out roots, plowing steep side-hills, erecting cottages, conducting spring water to comfortable homes, fencing in all tillable spots, and doubling the value of mountain lands.—*Santa Cruz Sentinel*.

#### A WINTER IN CALIFORNIA.

A correspondent of the Boston Journal, writing from this State, says, in the course of a communication:

The fact is, the winter climate of California is one of the best in the world. Except upon the mountains there is no snow, and only an occasional frost in the coast valleys. All along the coast, from San Diego to Mendocino county, and inland for 100 miles, the tourist finds that the winter is simply the vernal season. Here and there he sees oranges ripening on the trees, which are, in many instances, blossoming for more fruit. The hills are covered with new grass, there is the tilt of fields, the budding and blossoming of roses in all the gardens, the blooming of mimosa by the wayside, the blue sky, the sun, and, for the most part, the tranquil sea.

#### J. D. SPRECKELS & BROS.,

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS,

325 Market Street,

SAN FRANCISCO.

#### CALIFORNIA SUGAR REFINERY,

Manufacturers of the

#### STANDARD SYRUP,

A SUPERIOR ARTICLE.

Put up in Barrels Expressly for Home Consumption.

ALSO,

#### EXTRA HEAVY SYRUP,

In Barrels for Export.

#### REFINED SUGARS,

At Lowest Market Rates.

Office: 325 Market Street. Up Stairs.

**\$72** A work made at home by the industries. Good business now before the public. Capital not needed. We will start you. Men, women, boys and girls wanted everywhere to work for us. Now is the time. You can work in spare time, or give your whole time to the business. No other business will pay you nearly as well. No one can fail to make enormous pay, by engaging at once. Only an ill and timid free. Money made fast, easily and honorably. Address: Thos & Co., Angels, Maine.



San Francisco, - - California.

#### ON THE EUROPEAN PLAN.

ELEGANTLY FURNISHED ROOMS.  
FIRST-CLASS RESTAURANT.  
The Handsomest Dining-room in the World.  
WM. F. HARRISON, Manager.

#### COMMERCIAL INSURANCE COMPANY OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, Dec. 31, 1881, \$377,457.82

Losses Paid Since Company was Organized nearly, \$500,000.

JOHN H. WISE, President  
CHAS. A. LATON, Secretary

#### OFFICE.

No. 405 California Street, S. F.

#### DO YOU ADVERTISE!

Do you wish to advertise in the amount of a few dollars only? Apply to us, and we will inform you how you can invest the amount most judiciously.

#### WE WILL TELL YOU HOW.

If you wish advice or information on the subject, we shall be glad to communicate with you and endeavor to give you satisfaction.

#### YOU CAN SAVE MONEY.

Do you wish to advertise extensively? Send a concise statement of what you wish to do, and await our estimate before giving out the order.

#### TIME.

Have you a list of papers to which you find it pays you to advertise? Send your list and advertisement to us. By so doing, you can save expense, time, and the trouble of attending to the business.

#### ANNOYANCE.

Does it give you trouble to look after the advertising in each particular paper? Let us do your business, and we will handle every paper, and see that every insertion is properly given and all obligations made good.

#### AND HAVE YOUR WORK DONE

In your credit as well established that you can secure very low rates by trading direct with publishers? If so, we want your business, and will procure you equally low rates.

#### CHEAPER.

If you do much of little, we shall be glad to do it for you, and give you every advantage which our experience of seventeen years enables us to offer.

#### BETTER.

Do you find it difficult to get exactly what you want? Write us in detail just what you will require and see if we do not give you satisfaction.

#### AND MORE PROMPTLY.

Are you annoyed by needless delays? We promise you they shall not occur if you trade with us. We always send out all orders and check all papers the day they are received.

#### BY SENDING YOUR ORDERS TO

If you want the most expensive advertising, we can give you the papers to suit it. If you want the cheapest, we can give you the same, and in either case it will pay you to write to us.

#### GEO. P. ROWELL & CO.,

If you live here or come to our city, we shall be glad to have you call at our office, whether you are ready to advertise or not.

#### NEWSPAPER ADVERTISING BUREAU.

We have an entire building of our own, we keep all the newspapers on file, and shall take pleasure in showing you how we do our work. If you can't come, write for our circular and catalogue, which will be sent free.

NO. 10 SPRUCE ST., NEW YORK.



FIRE AND MARINE

INSURANCE AGENCY

OF

HUTCHINSON

& MANN,

Nos. 322 and 324 California Street,

and 302 and 304 Sansome Street,

San Francisco.

Agents for The

Dwelling House Underwriters, New York,

\$2,100,741 06.

Girard F. & M. Ins. Co., Philadelphia,

\$1,101,313 26.

La Confluence Ins. Co., Paris, France,

\$6,679,565.

New Orleans Ins. Ass'n., New Orleans,

\$573,216.

Standard Fire Office, London, England,

\$1,300,000.

St. Paul F. & M. Ins. Co., St. Paul, Minn.,

\$837,893 43.

The Fire Ins. Ass'n (Limited), London, Eng.,

\$1,312,673 14.

Teutonia Ins. Co., New Orleans,

\$401,753 71.

Watertown Ins. Co., Watertown, N. Y.,

\$1,006,656 23.

MARINE.

The London and Provincial Marine Insurance Company, London,

\$6,278,362.

La Fonciere Marine Ins. Co., Paris,

\$2,250,000.

Capital Represented. . . \$27,650,527

SAN FRANCISCO, CALIFORNIA.

W. L. CHALMERS, Z. P. CLARK,

Special Agents and Adjusters.

THE

Globe Iron Works Co.

FOUNDRY,

MACHINE SHOP,

and FORGE.

Manufacturers and Repairers of all Kinds of

MACHINERY AND IRON CASTINGS,

Hoisting and

Mining Machinery,

Portable, Stationary and

Marine Engines.

BISHOP'S ECONOMICAL MINING

PUMP APPARATUS,

Which does away with Cumbersome Pump

Rods, Valve and Balance Rods, operating

equally well in shafts or in inclined workings

of difficult and distant workings. Circu-

lars furnished free, upon application.

AND

C. H. BAKER'S MINING HORSE-

POWER

SPECIALTIES.

ALSO C. D. LOUNTS' PATENT AIR

COMPRESSORS.

222 and 224 Fremont St.,

Between Howard and Polson,

San Francisco.

JAMES G. STEELE & CO.,

Druggists and Manufac-

turing Chemists,

RESPECTFULLY CALL ATTENTION TO

THEIR NEW ARRIVALS OF

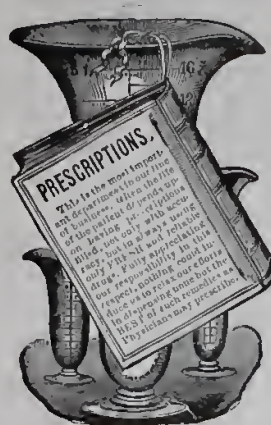
Foreign Perfumery, Cologne, Scented

Taliet Soaps, Hair, Tooth and Nail

Brushes, Combs, Hair Oils, Pomades, Face

Powders and Cosmetics, Sponges,

Patent Medicines, Etc., Etc.



JAMES C. STEELE & CO.'S

Palace Drug Store,

PALACE HOTEL.

645 Market Street - - SAN FRANCISCO.

W. T. GARRATT'S

BRASS AND BELL FOUNDRY.

SAN FRANCISCO.

MANUFACTURER AND IMPORTER OF

Church and Steamboat BELLS and GONGS

BRASS CASTINGS of all kinds,

WATER GATES, GAS GATES,

FIRE HYDRANTS,

DOCK HYDRANTS,

GARDEN HYDRANTS.

A GENERAL ASSORTMENT OF ENGINEERS' FINDING

Hooker's Patent

CELEBRATED

STEAM PUMP

22" The best and most

durable in use. Also

a variety of other

PUMPS

For MINING and

FARMING purposes

Root's Blast Blowers,

For Ventilating Mines and for Smelting Works

HYDRAULIC PIPES and NOZZLES,

For Mining Purposes.

GARRATT'S IMPROVED JOURNAL META.

IMPORTER OF

IRON PIPE AND MALLEABLE IRON FITTING

ALL KINDS OF

SHIP WORK & COMPOSITION NAILS

AT LOWEST RATES.

The California Lloyds

UNION

INSURANCE COMPANY

OF CALIFORNIA.

THE CALIFORNIA LLOYD:

(Established in 1861).

FIRE AND MARINE

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 496 and 418 California St.

Agencies in all the Principal Cities of the

United States.

G. TOUCHARD, President.

N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary

C. P. FARNFIELD, General Agent

GEORGE T. BOWEN, Surveyor

ITS ADVANTAGES TO IMMIGRANTS.

The Southern Pacific is now completed to its Eastern terminus, and the last spike connecting this coast with New Orleans has been driven. What effect this will have upon us is yet to be seen, but there can be little doubt that it will be of material aid in our future welfare. It is announced that emigrants can ship at Havre, through to California via this route, for \$65; so it may be the means of bringing to our coast a large portion of the laboring population of the old countries, and practically solving the Chinese question, by furnishing reasonably white labor to do our work. It will also be the means of bringing a great deal of emigration through to Southern California, and making our many advantages known to the world, and there is no doubt but that many who would never have visited us will now find their way here for the winter months. The further completion of the Atlantic & Pacific will still further aid us in this respect and it is safe to predict that Southern California is now on the turning-point for a prosperous future more brilliant than most of us would believe. We have now two transcontinental roads, the S. P. and the A. & P.; both will pass through our valley, the latter by the C. S.; another road, the Utah Southern, is pointing toward us, and will come in time. We shall thus have railroad connection with the south end, the S. P., the Central States and Territories via the A. & P., the Northern Territories via Utah Southern and Utah Northern. It will be but a few years before San Bernardino will be a central point from which we can take rail to any portion of the United States direct, and a point upon which all attention will be centered, on account of its railroad facilities, added to its many other inducements. Below we give an account of the completion of the Sunset Route:

The new road leaves the main line of the Southern Pacific road at Deming, N. M., and runs to El Paso, Texas, where it crosses the Rio Grande. It extends thus by a circuitous route, across Texas, to San Antonio, connecting at that point with the Galveston, Harrisburg, and San Antonio road, and running thence to connect with the former Texas and New Orleans road, and terminates at New Orleans.

The place where the last spike was driven into the sleeper, is in the south-western part of Texas, about 490 miles from a bridge across the El Paso river, near a tributary of the Rio Grande, called the Devil's river.—San Bernardino Times.

A RAPIDLY GROWING TOWN.

The Pomona Times, Los Angeles county, says: Every day brings new citizens to our town, and every day new buildings are commenced. The town of Pomona and the valley surrounding it is advancing with an astonishing rapidity. Old citizens who have held out faithful and remained with the town through the slow days of the past, are to-day satisfied that their judgment was sound in making their homes here. Those who have been here but a short time are more and more pleased with the country every day, and those who have but just arrived are happy in their choice of location. No one seems disappointed. No complaints of being wrongly informed or of having had overdrawn or bogus inducements held out. This country needs no bolstering or galvanizing, but stands square on its merits. All take right hold and show that their entire satisfaction and full determination of staying by building homes, business houses, and otherwise improving. And another point, very pleasing to all concerned, is that those coming are of the kind that make good citizens and a prosperous community. To every observing person it is plain that Pomona is destined to be a live, business town of no small proportions or mean appearance, and that the valley surrounding it will keep pace and be peopled by a corresponding class—a class that sustain law, uphold morality, and build school-houses and churches. It takes time to bring about great achievements. Ten years hence—or even five—will show to the world what can be accomplished where everything is as favorable as it is here.

A MAMMOTH OAK.

The Solano Republican time speaks of the value of this tree for fire wood:

We all know, as a matter of fact, that the oak grows to an enormous size on this coast. It does not tower up like the giant redwood, but grows to a reasonable height, when it branches out in all directions, and many of its arms or limbs are nearly half the size of the body that supports them. To look at one of these trees casually while passing through a grove there isn't one person in a thousand that has any idea of the amount of stovewood that one of these gnarled, lanky-topped trees contains. For the benefit of those who scarcely ever give it a thought, we will mention an instance where one of these mammoth trees was cut a few days ago. L. B. Abernethie's word for this: He felled on his ranch an oak that, when worked into stovewood, made 131 tiers, or 45½ cords, which, delivered at Suisun, is worth \$4 per cord. If any of the farmers living in Solano valley or elsewhere can beat this, let them now speak, or ever after hold their peace.

WOOD GROWING.

We learn from the Fresno Examiner that wood has been sold at seven dollars per cord in that town during the past year, and those who had it up to town say that there is very little profit in it to them at that price, and that the price must continue to advance, from year to year. A writer in the *Idaho*, in connection on the above, says:

The wood supply seems to be a matter worth consideration, and it seems remarkable that some of the parties owning land near Fresno, susceptible of being irrigated, have not taken the matter under advisement before. In fact, we don't see why every farmer does not devote a portion of his ground to growing timber for fuel. In some parts of the State, the farms are surrounded by rows of cottonwoods, willows, gums, etc., and, from time to time, these trees are lopped about eight feet from the ground, and made into firewood. The tree at once puts out a new top, and, in a year or two, is ready to yield another crop of wood. In other places considerable areas of land are planted with blue gums, and, from time to time, are cut down for wood. These trees spring up again from the roots, and are cut down again as soon as they have attained a sufficient growth. Land devoted to timber culture pays an average of over \$100 per acre in sections where wood is cheap, but in this section it will pay greatly in excess of that figure where wood sells as high as \$7 per cord, it will pay \$150 per acre per annum.

NO PHYLOXERA.

We find the following in a late issue of the Fresno Republican:

I have examined the following named vineyards and colonies for phylloxera, and failed to find the slightest traces of any: Muller's Fresno, Butler, Burton, Eisen, Eggers, Williams, Hudson, and Kearney vineyards, and Nevada, Church, Central California, and Scandinavian colonies. I should like to advise every vineyardist in the county to be very careful in ordering cuttings and rooted vines. It is hardly necessary to go beyond the limits of Fresno county, and by far the most prudent not to do so when we consider the possible result, as regards phylloxera. Now, that we are still clear of this pest, it will be worth millions of dollars to this promising and thriving center of a fruit-growing community not to let this enemy be brought among us. One single infected cutting will do the business; Buy your rooted vines, cuttings, and fruit trees at home if you can possibly be suited. This is the only real safeguard we have.—M. DENCKER, Local Resident Inspector.

APRICOTS FOR PROFIT.

Apricots are certainly one of the coming fruits. They do well in all coast counties south of San Francisco, as well as in several interior counties, including Yolo, Sacramento and Sutter. It requires a deep, rich, alluvial soil to produce them to perfection. In fact, if profit is the object, it is a waste of time and money to attempt to grow them on indifferent land. It is, we believe, universally conceded that the trees do better and are longer lived grafted on their own than any other kind of roots. Peach stock, it is claimed, will bring apricots into bearing earlier than other bushes. This, we think, is true, but is at the expense of the thrift and continued life of the tree. Many timid growers are predicting that the great demand for and the amount of apricots trees planted is indicative that the business is overdone. For our single self we have little apprehension in that line, for the reason that California is the only country in the three continents where the apricots prosper, consequently the demand for them in a preserved state is almost unlimited.—S. F. Patron.

THE IDAHO MINE OF GRASS VALLEY.

The Grass Valley Union says: The billion yield of this mine, since 1869, has been \$7,407,400, from which 162 dividends, of \$3,364,050, have been paid. Stockholders have received 45 per cent. of the gross billion produced, which is equal to \$1,086 per share. A mine that gives \$45 to stockholders out of every \$100 it produces is the kind of a mine that a good many investors are just now hunting for. The Idaho produced \$534,686 in billion last year, and paid \$203,500 in dividends. It has done better and worse than this. Last year was the fifth best year in the history of the mine. It took out 27,559 tons of ore, averaging \$20.64 per ton, at a cost of \$9.83 per ton for mining and milling. The pay charge on the 1,100-foot level has been exhausted. The 1,200-foot level and stopes have not done very well for the past year, but are expected to do better hereafter. On the 1,300-foot level the ledge is two and one-half feet wide, on an average.



# STOVES

For Cooking, Parlors, Offices, Halls, Bed-Rooms, Churches, Stores, Etc.

THE LARGEST STOCK AND GREATEST VARIETY  
WEST OF THE ROCKY MOUNTAINS.

Over 500 Different Sizes, Styles and Patterns to Select from.

TIN PLATES

SHEET IRON

PUMPS

IRON PIPE

BRASS GOODS

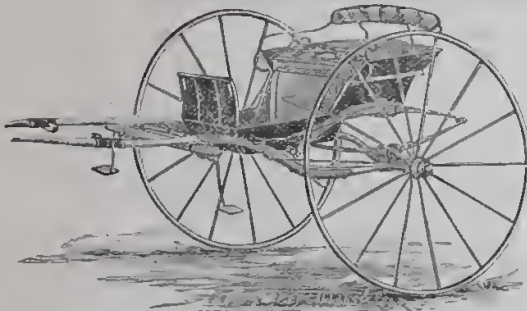
MANUFACTURERS OF

PLAIN, JAPANNED AND STAMPED

## TINWARE

### W. W. MONTAGUE & CO.

110, 112, 114, 116 and 118 Battery St



No. 4.

#### HORTOP'S EUREKA CART.

Six Different Styles. The Best Style Cart now in use. Easy riding, Stable and very neat. With Pole, Shafts or Canopy Top. Manufactured by the  
**RUTHERFORD AGRICULTURAL WORKS,**  
RUTHERFORD, NAPA COUNTY, CALIFORNIA.  
Price from \$60 to \$150. **HENRY HORTOP, Patentee.**

#### THOS. PRICE'S ASSAY OFFICE

AND CHEMICAL LABORATORY,

524 Sacramento Street, San Francisco.

DEPOSITS OF BULLION RECEIVED, MELTED  
into bars, and returns made in from twenty-four  
to forty-eight hours.

Bullion can be forwarded to this office from any part  
of the interior by express, and returns made in the  
same manner.

Careful Analyses made of ores, metals, soils, waters,  
industrial products, etc. Mines examined and reported  
upon. Consultations on chemical and metallurgical  
questions.

J. F. FARNSWORTH.

M. T. BREWER

**M. T. BREWER & CO.,**

No. 30 and 32 J Street,

SACRAMENTO, CALIFORNIA

COMMISSION MERCHANTS & WHOLE-  
sale dealers in Foreign and Domestic Goods  
and Drift Goods, Produce, Honey, Nuts, Garden  
and Flower Seeds. Please give us a trial. 30 and 32  
J Street, Sacramento, Cal.

**REST** not, life is sweeping by, go and dare be-  
fore you die, something mighty and sub-  
lime leave behind to comfort those "who  
a week in your own town, 15 until you. No risk,  
everything new. Capital not required. We will fur-  
nish you everything. Many are making fortunes. La-  
dies make as much as men, and boys and girls make  
great pay. Reader, if you want business at which you  
can make great pay all this time, write for particulars to  
H. HARRIS & Co., Portland, Maine.



**B. FRIEDLANDER,**

The Leading Merchant Tailor

OF SAN FRANCISCO.

STORE AND MANUFACTORY:

NO. 761 MARKET STREET,

Awarded the First Premium

—AT THE—

MECHANICS' FAIR IN 1882

At Portland, Oregon.

A FULL LINE OF

French, German and English Cloths  
**ALWAYS ON HAND.**

Samples with Self-measurement Sent Free.

**PERFECT FIT GUARANTEED.**



BROAD GAUGE.

#### Winter Arrangement.

Commencing Sunday, Oct. 22nd, 1882,  
And until further notice, Passenger Trains will leave  
from, and arrive at San Francisco Passenger Depot  
(Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
6:50 A. M.		6:40 A. M.
8:40 A. M.		9:05 A. M.
10:40 A. M.	San Mateo, Redwood...	*10:02 A. M.
3:30 P. M.	and Menlo Park...	3:37 P. M.
4:30 P. M.		*5:04 P. M.
6:30 P. M.		6:02 P. M.
8:30 A. M.		9:05 A. M.
10:40 A. M.	Santa Clara, San Jose and...	*10:02 A. M.
* 3:30 P. M.	Principal Way Stations...	3:37 P. M.
4:30 P. M.		6:02 P. M.
10:40 A. M.	Gilroy, Pajaro, Castroville...	*10:02 A. M.
* 3:30 P. M.	and Monterey...	6:02 P. M.
10:40 A. M.	Hollister and Tres Pinos...	6:07 P. M.
10:40 A. M.	Watsonville, Aptos, Seaside...	6:02 P. M.
* 3:30 P. M.	and Santa Cruz...	6:02 P. M.
10:40 A. M.	Salinas, Soladad and Wyo...	6:02 P. M.
	Stations...	

\*Sundays excepted. (Sundays only (Sportman's  
Train).)

Stage connections are made with the 10:40 A. M. Train,  
except Pescadero Stages via San Mateo, which  
connect with 8:30 A. M. Train.

#### EXCURSION TICKETS

Sold on Saturdays and Sunday mornings—good to re-  
turn Monday—  
To San Clara or San Jose.....\$2.50  
To Monterey or Santa Cruz.....5.00  
Also to principal points between San Francisco and  
San Jose.

TICKET OFFICES.—Passenger Depot, Townsend street  
and No. 2 New Montgomery street, Palace Hotel.  
A. C. BASSETT, H. R. JUDAH,  
Superintendent. Asst. Pass. & Tkt. Agt.

AT 7 P. Atlantic Express Train via Los Angeles, Yu-  
ma, etc. leaves San Francisco daily via Oakland Ferry,  
foot of Market street, at 9:30 A. M.

#### OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY

FOR JAPAN and CHINA

LEAVE WHARF CORNER OF  
First and Brannan Streets, at 2 P. M.,  
**YOKOHAMA & HONGKONG**

Connecting at Yokohama with Steamers for Shanghai

Will sail from San Francisco  
1883.

ARABIC.....Thursday, January 18.  
OCEANIC.....Tuesday, January 30.  
COPTIC.....Saturday, February 10.  
GAELIC.....Thursday, March 4.  
HELIC.....Saturday, March 17.

#### SPECIAL NOTICE

The Steamship *Galathea* from San Francisco March 6th,  
also the Steamship *Belgia* of March 17th, will con-  
tinue on from Hongkong, via Singapore, to London, offer-  
ing superior accommodations and quick time for Tour-  
ists on route "Around the World."

Excursion Tickets to Yokohama and Re-  
turn at Reduced Rates.

Cable plans on exhibition and passage tickets for  
sale at C. P. R. Co.'s General Offices, Room  
71, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE,  
Freight Agent, at the Pacific Mail Steamship Com-  
pany's Wharf, or at No. 202 Market street, Union  
Block.

T. H. GOODMAN,  
Gen'l Passenger Agent

LELAND STANFORD,  
President

#### THE NEVADA BANK

—OF—

**SAN FRANCISCO.**

Paid Up Capital.....\$3,000,000

Reserve (U. S. Bonds).....3,500,000

Agency at New York.....63 Wall Street  
Agency at Virginia, Nevada.

ISSUES COMMERCIAL AND TRAVELERS  
Credits  
Buys and sells Exchange and Telegraphic Transfers

This Bank has Special Facilities for Deal-  
ing in Bullion.

SAN FRANCISCO, California.



QUICK TIME AND CHEAP FARES

FROM

AUSTRALASIA, CHINA & JAPAN,

TO

**NEW YORK**

AND

**LIVERPOOL**

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

**CENTRAL PACIFIC  
RAILROAD**

CONNECTING WITH

Union Pacific Railway

AT OGDEN, UTAH,

AND

**SOUTHERN PACIFIC  
RAILROAD**

CONNECTING WITH

Atchison, Topeka and Santa Fe  
Railroad,

AT DEMING, NEW MEXICO.

AND THE

Galveston, Harrisburg and San  
Antonio Railroad,

AT EL PASO, TEXAS.

THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway  
Lines in the Eastern States, for all the Cities of the

**UNITED STATES AND CANADA.**

CONNECTING AT

**NEW YORK**

With the several Steamer Lines to

**England, France,**

AND ALL EUROPEAN PORTS.

Silver Palace Sleeping Coaches.

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW  
YORK, and intermediate points. These Drawing Room  
cars by day, and Sleeping Cars by night, are unequalled  
for comfort and convenience to the passenger, and on  
route—combining the pleasure of a private parlor, and  
all accommodations pertaining to a well-furnished  
chamber, with comfortable emblems, clean bedding, etc.  
A competent Porter accompanies each Car, to attend  
to the wants of our Patrons.  
Children under Twelve years of age, Half Fare.  
Under Five years of age, Free.  
100 pounds of Baggage per full Passenger  
free. 50 pounds of Baggage per half Pas-  
senger, free.

**PRINCIPAL TICKET OFFICE**

AT THE

**OAKLAND FERRY LANDING,**  
Foot of Market Street, San Francisco.

Where passengers, calling in person, can secure choice of  
routes and sleeping-car accommodations.

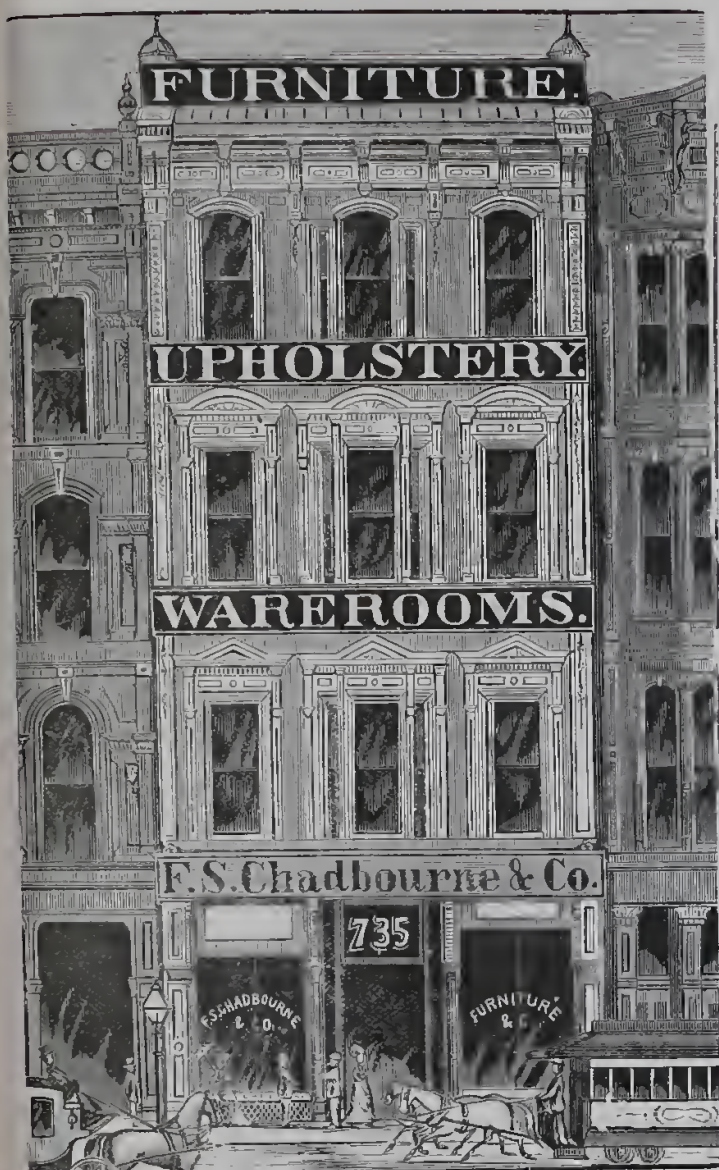
A. N. TOWNK, T. H. GOODMAN,  
Gen'l Agent, San Francisco, Cal. Asst. Pass. & Ticket Agt.  
SAN FRANCISCO, CAL.



F. S. CHADBOURNE & CO.,

735 MARKET STREET, - - SAN FRANCISCO, CAL.

WILL REMOVE TO 741, 743, 745 MARKET ST.,



IMPORTERS, MANUFACTURERS,

AND—

Wholesale and Retail Dealers in  
**FURNITURE AND BEDDING**  
**OF EVERY DESCRIPTION.**

Chamber, Parlor, Library and Dining  
Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish  
Easy and Lounging Chairs, Etc.—Hotels and Private  
Residences Furnished.—Designs Furnished  
and Estimates Given.

F. S. CHADBOURNE & CO.,

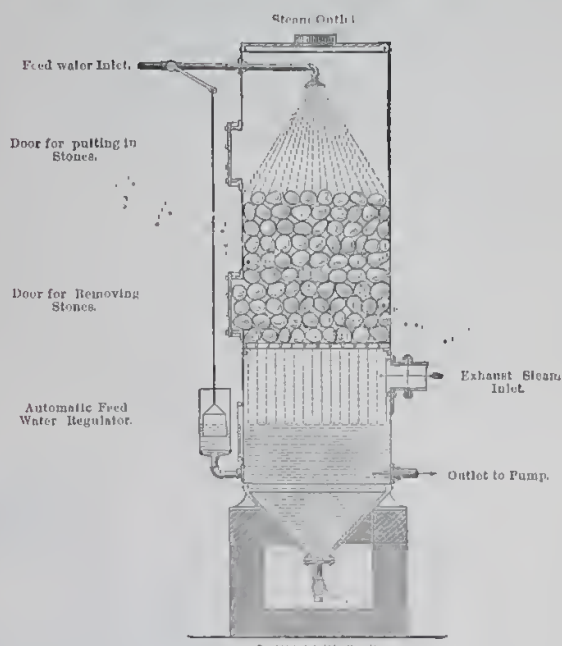
735 Market Street. - - San Francisco.

CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

**LLEWELLYN FILTER-HEATER,**

Patent Issued Aug. 12, 1879, Re-issued Aug. 14, 1881.

For the Prevention and Removal of  
**STEAM BOILER INCRUSTATIONS**  
WITHOUT THE AID OF CHEMICALS.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent. of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.  
Further particulars with full descriptive circular and price list can be obtained at the office of the

LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufacture, Columbia Foundry, 133 and 135 Deale Street.

WM. B. ISAACS.

J. D. CULP.

S. E. THORNTON.

**J. D. CULP & CO.,**

**MANUFACTURERS OF HAVANA CIGARS,**

And Importers of

**LEAF TOBACCO.**

No. 16 Front Street, - - - SAN FRANCISCO.

The "GIRLS"  
are a Four and  
Three-quarter  
Inch Cigar.  
Made from Pure  
Tobacco.

NO DRUGS.

NO ARTIFICIAL  
FLAVOR.

TRY THEM.



Send for a  
Sample Or-  
der, and  
Give our

"GIRLS"  
a Trial.

YOU WILL  
WANT MORE.

Manufactured by

**J. D. CULP & CO.,**

No. 16 Front Street, - - - SAN FRANCISCO.



## SANTA CLARA WINE BELT.

Vines on or near Stevens Creek—The Favorite Varieties—The Future of the District.

An experienced viticulturist furnishes the Santa Cruz Sentinel with the following valuable information:

A trip through what is called the "Wine Belt" of Santa Clara Valley is now interesting and instructive. The center of the region is on the Stevens Creek road. It begins about a mile beyond the Meridian road, and extends northward to Mountain View, and southward and outward, following the course of the mountains, to Gilroy. It includes on the average about two miles of the valley, and extends a considerable distance into the foot-hills. The soil is a reddish, gravelly loam, which is peculiarly suitable for the production of wine grapes, although, of course, it is somewhat variable. There are gulches, for instance, in which the red soil is covered by a deep, strong, black vegetable mold, too rich for vines; and, again, there are mixtures of both soils. There are also peculiarities of conformation, which are said to make considerable difference both as to the flavor and ripening of the grapes. Some lots slope to the north, and others to the east and west; and though all will grow good grapes, those that have a gentle declivity to the southeast are said to be the best of all. They are protected from the north and northwest winds, and they are open to the sun the whole of the day. Consequently the grapes ripen earlier, and are less liable to be damaged by early or late frosts. So far, therefore, such situations have been carefully selected by experienced viticulturists, and the result has fully vindicated the wisdom of their course in that respect.

The Stevens' Creek road runs through about the center of the belt, and the largest and most flourishing vineyards lie on both sides of it. A little to the north S. P. Collins of San Francisco, has a tract containing 250 acres, the greater portion of which is covered with flourishing vines, and the rest is now in course of preparation for planting during the coming season. The lot is in splendid condition, the ground having been carefully selected and well prepared, and the cuttings well cultivated through the season. J. T. Doyle, also of San Francisco, has 150 acres of vines in good condition, and is preparing to plant another large tract. This gentleman has also erected a large brick building with cellar, for the manufacture and storage of wine, which is fitted with all the most approved appliances for the business, and must have cost altogether, nearly thirty thousand dollars. A. C. Hollenback has 120 acres of vineyard, and J. P. Pierce, 100 acres. The latter gentleman has also made elaborate preparations for the manufacture of wine, and will probably make arrangements to purchase and use grapes grown on the smaller tracts around him. Then there are numerous tracts, ranging from twenty to fifty acres each, planted to vines, and intended to supply the several wine presses that are to be put up by the larger growers. Among the most notable of these is that of J. B. J. Portal. This gentleman is a Frenchman, and comes to the business with the experience of ages on his brow, so to speak. He has made an excellent selection, both as to soil and situation, and by his success in wine-making from a smaller vineyard, has already achieved a high reputation, and has demonstrated that Santa Clara Valley has no superior in the world in its capabilities for the production of the finer kinds of Burgundy. He has forty acres just coming into bearing, and will plant fifty acres more next season, all of the choicest Burgundy varieties.

Great pains have been taken by all in this region to exclude inferior or diseased vines. The very choicest cuttings have generally been selected with regard to the price. Indeed, several tracts were not planted last season because of the difficulty of obtaining a sufficient number of cuttings of the varieties desired. Zinfandel appears to be the favorite, and next to it comes Charbonneau. The other principal varieties planted are Trousseau, Mataro, Malvoise, and Pinot Noir. But in every case good, healthy cuttings have been planted, and the result is a smaller percentage of loss, and a healthier and more vigorous growth than can often be seen in young vineyards.

And this is but the beginning. Most of the land in the district above mentioned will surely be planted with vines within the next year or two. Several large capitalists have taken hold of the business and are preparing to plant from five hundred to one thousand acres each. The result of this activity is everywhere seen in the increased price of land and in the rapid improvements which are going on. Land that last year could have been purchased at \$60 an acre now ranges from \$100 to \$200 an acre, with plenty of purchasers at that. And, indeed, why should one hesitate about the expenditure of a few dollars an acre on the flat east of land when he can get 8 tons of grapes an acre, and receive \$30 a ton for them? It is almost like rolling money, and while it lasts is certain to keep land at very high figures. And there appears to be no good reason why it should not last. The soil and the climate are there, and it only requires labor, experience and money to make these circumstances permanent. The money is already forthcoming, and the brains

are there, and it certainly should not take long to gain the necessary experience under existing conditions.

## FRUIT IN CALIFORNIA.

A correspondent of the New York Staats Zeitung, a first-class German paper, gives the following interesting and instructive view of the fruit interests in California:

California fruit has become an important staple in the markets of the world, and is sent, canned, preserved and dried, to all countries. It is the wonderfully comprehensive character of fruit culture in this State that constitutes its most striking trait. The variety of fruits successfully grown here far surpasses that of any other region of equal extent, and it keeps on continually increasing by the introduction of new grades and species from every part of the globe. Although semi-tropical fruits thrive best south of the 35th degree of latitude, in the counties of Ventura, Santa Barbara, Los Angeles, San Bernardino and San Diego, it has been cultivated successfully in other parts of the State, and even as far north as the border county of Shasta. Many of those who grow fruit for their use raise, side by side, that of the tropics and that of the north temperate zone—the currant and the orange, the cherry and the fig, strawberries and pineapples, bananas, dates and apples. California fruit ranches display apple, pear, peach, plum, prune, apricot, nectarine, cherry, quince, fig, orange, lemon, lime, pomegranate, olive, English walnut and almond trees. The fig tree gives two

ries and strawberries arrive in fine condition at Denver after a four days' journey. Very striking, also, is the size to which fruit trees attain. The apricot grows to the dimensions of a large Eastern shade tree. Phenomenal size and growth, indeed, are characteristics of all kinds of trees in this climate. The Australian blue-gum or eucalyptus, shoots up twenty feet in a single year.

California apples are distinguished for extraordinary size and splendid color. The most highly prized is the Jambon or Redflower. They are grown successfully as far south as San Diego county, near the Mexican border; but it is in the hilly counties of the north, where the winters are colder, that they are juiciest and hardest. Bartlett pears have been remarkably prolific, and under the most favorable conditions have yielded a net profit of \$3,000 per acre in a single season. The apricot has given some of the best results. The delicate flavor of our apricot has made it very popular for table uses, as well as for canning and drying, and the crops being enormous and the prices good, it has been a profitable fruit to grow. In 1879 a twelve-acre apricot orchard near San Francisco, yielded 310,000 pounds of fruit that was sold at 5 cents a pound. This netted a profit of \$1,200 per acre. On the banks of the Sacramento, about twenty miles below the city of Sacramento, there are a large number of prolific peach ranches that in good years have produced 27,000 pounds of fruit to the acre.

One of the most important of the industries developed in this State has been the canning of fruit. California canned fruit, while prized for its size,

New canneries are being erected in the various fruit districts. One of the latest is at the Fresno colony, in the San Joaquin valley, where fine apricots are grown with the aid of artificial irrigation, the right of which is sold by a corporation to the growers at the rate of \$20 to \$50 an acre. Whichever canneries are established the fruit-grower may count upon a profit of at least \$100 to \$200 an acre. These canning factories have a market in Europe for all the fruit they can export, and the demand for their wares is constantly increasing. Thousands of men, women and children find employment in them.

## A TRIBUTE TO FARMERS.

The following worthy tribute to the farmer is from the pen of Ralph Waldo Emerson:

The glory of the farmer is, that, in the division of labor, it is his part to create; all trade rests at last on his primitive activity. He stands close to nature; he obtains from the earth the bread and meat; the food which was not he causes to be. The first farmer was the first man, and all historic nobility rests on possession and use of land. The farmer's office is precise and important, but you must not try to paint him in rose colors. You cannot make pretty compliments to fate and gravitation, whose minister he is. He represents the necessities. It is the beauty of the great economy of the world that makes his comeliness. He heads to the order of the season; the wrath of the soil, and crops, as the sails of the ship bend to the wind. He represents continuous hard labor year in and year out, and small gains. He takes the peace of seasons, plants and chemistry. Nature never harvests; atom by atom, little by little, she achieves her work. The farmer ties himself to Nature, and acquires that lifelong patience which belongs to her; he must wait for his crop to grow. His entertainments, his pleasures and his spending must be on a farmer's scale, not a merchant's. It were as false for farmers to use a wholesome and many expenses as for States to use minute economy. He has great trusts confided to him. In the great household of Nature the farmer stands at the door of the breadroom and weighs each loaf. It is for him to say if men shall marry or not. Early marriages and the number of births are indissolubly connected with an abundance of food. The farmer is a hoarded capital of health, as the farm is of wealth, and it is from him that the health and power, moral and intellectual, of the cities come. The cities always recruited from the country. The men in cities, who are centers of energy, the driving-wheels of trade, and the women of beauty and genius—are the children and grandchildren of the farmer, and are spending the energies which their fathers' hardy, silent life accumulated in frosty furrows. He is a continuous benefactor. He who digs a well constructs a stone foundation, plants an orchard builds a double house, reclaims a swamp, or so much as puts a stone seat by the wayside, makes the land so far lovely and desirable, makes a fortune which he cannot carry away with him, but which is useful to his country long afterward.

Who are the farmer's servants? Geology and chemistry, the quarry of the air, the water of the brook, the lightning of the cloud, the casing of the worms, the plow of the frost. Long before he was born the sun of ages decomposed the rocks, mellowed his land, soaked it with light and heat, covered it with vegetable film, then with forests, and accumulated the sphagnum whose decays made the peat of his manure.

## RAISIN MAKING.

In all parts of the State there is an unusual tendency among land owners and farmers toward viticulture, and it has been said there is danger that the business of growing raisin grapes will be overdone. But there need not be excess if all who enter the business thoroughly understand it and grow the right kind of grapes. This matter was thoroughly discussed and made clear at a recent fruit-growers' convention held at San Francisco. At that convention a letter was read from James Boyd, of Riverside, in which that practical viticulturist stated that the raisin business of the State was in its infancy. Mr. Boyd insists that we can make in this State the best quality of raisins. All that is necessary is experience and the selection of the proper climate and lands. These we have almost everywhere. Mr. Boyd says:

The total cost of growing and making them into raisins is about \$37 10 an acre on one-year-old vines. For each succeeding year \$25 an acre should be added for additional labor. The returns after two years would be \$80 for the third, \$140 for the fourth, \$320 for the fifth and \$400 for the sixth year—a total of \$1,040 against \$370 10 for expense. For picking and packing \$350 would have to be expended, leaving \$370 00 an acre at the end of six years.

In addition to the above statement, Mr. Boyd cited an instance where one grower sold 615 boxes from two acres, in about thirty months from the time of planting, realizing over \$1,200 at a cost of not over \$300. Mr. Boyd is a practical and reliable grower of raisin grapes, and his testimony ought to be satisfactory to all who propose to go into the raisin business. Marysville Appeal.



RAILROADS IN THE MOUNTAINS.

crops a year in the southern counties of the State. All kinds of berries grow in profusion, and come earlier and stay longer than in the East. Strawberries are usually to be had the whole year round, and always from March to January. Some of the most valuable features of California fruit are the freedom from worms, the fitness for drying, and exemption from any form of disease.

It has been said by some that California fruit lacks flavor and juiciness, and is in these respects inferior to Eastern fruit, but the a section will not bear a fair test. There is fruit grown in California that is not of the best quality, but there is not much of it, and every year the quantity is decreasing. Improvement in grade and species is going on continually, and the care and skill displayed are constantly becoming more marked. The average fruit raised to-day is of a high order of excellence.

At the beginning of last year the State possessed about 6,000,000 fruit trees, among them 2,400,000 apple, 800,000 peach, 300,000 pear, 200,000 plum and prune, 130,000 cherry, 250,000 apricot, 50,000 fig, 1,000,000 orange, and 140,000 lemon trees. Trees begin to bear at a much earlier age than in the East. This is one of the great advantages, particularly considered, of fruit culture in this State. Peach trees often bear the second year after planting; apple trees begin to yield in the third year, and bear abundantly in the fifth. In this dry climate, too, ripe fruit hangs in good condition much longer, and is harder than it is in moister climates. This is particularly noticeable with fruit of such perishable a character as plums and cherries. California cher-

color, freedom from worms, taste, and flavor, can be sent abroad at lower prices, as a rule, than that of South European countries. Only the canned apricots and nectarines of Portugal and France can be placed in the London market at lower prices than the same kind of fruit from this State.

Canneries of fruit and vegetables have been established in all the important fruit districts of this State. The produce thus put up in 1881 aggregated 11,400,000 cans, of which 6,000,000 were fruits and berries in their natural form; 700,000 were jellies and sauces, and 4,700,000 kitchen vegetables, the last item including 3,000,000 cans of tomatoes and 500,000 of green peas. The San Francisco canneries put up 8,000,000 cans, and those of San Jose 2,000,000. Peaches, pears, apricots, plums, and cherries are the fruits most used here for canning. The apricot is regarded as the most profitable. The best peaches and apricots are obtained from the ranches along the Sacramento to and from the warm and sheltered fruit belt of Salinas county, not far from this city, where large fruit ripens soonest, and therefore fetches the best prices. The best plums come from Napa and Sonoma counties, and the best cherries from Alameda, across the bay from this city. The market prices in large quantities per dozen cans of 2½ pounds each are, for table fruit, \$1.85 to \$2.50; for pie fruit, \$1.40 to \$1.60; for tomatoes, 85 cents to \$1.10. The canners pay for peaches, plums, apricots and pears, \$50 to \$60 a ton. Nectarines, apples, canned grapes, strawberries, blackberries and raspberries are canned in a less extent than other fruit. The berries are sold mainly in the home markets.



# THE RESOURCES OF CALIFORNIA

J. P. B. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, MARCH, 1883.

ESTABLISHED, 1879.  
Office—320 Sansome St., Halleck Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM.**

Six Months, \$1.25—Postage Paid.

SINGLE COPIES, 20 CENTS.

ISSUED MONTHLY.

## SAN DIEGO COUNTY.

Area—Topography—Resources—Soil—Climate, Etc.

Principal City, and Other Towns, Described.

[By G. D. H., Traveling Agt., No. 2.]

San Diego was the first county settled in California. As early as 1542, and only 60 years after the discovery of America, a party of whites, under Cabrillo, paid a visit to the beautiful bay from which this section takes its name.

In 1769 Europeans began establishing missions under the Padres of the Franciscan order. This called settlers, and missions were founded from San Diego to Sonoma. San Diego was first and justly claims prior settlement to other parts of California.

The county of San Diego was organized in 1850, and is the second in size in California, as it has an area of 9,580,000 acres, which is naturally divided into three distinct sections.

The county is bounded on the north by San Bernardino, on the south by Lower California, on the east by Arizona (the Colorado river forming the line), and on the west by the Pacific Ocean and Los Angeles county, these forming the southwest corner of the United States.

### Natural Division.

As above stated, this county is naturally divided into three separate sections; the first to be mentioned being that portion lying east of the San Jacinto mountains, embracing more than half of the county, and is a barren waste, and, in many places, below the sea level. It is characterized by sand hills, granite points, dry lakes, mud volcanoes, hot springs and a growth of cactus.

The second division lies west of the San Jacinto mountains, comprising numerous valleys and plains, which rise in the west to the foot-hills of the Coast Range. These hills and mountains are covered with considerable timber, which will be of great benefit to the county at no distant day.

The third section lies between these foot-hills and the ocean, the surface of this section being known as mesa lands. On this division most of the inhabitants are to be found, for it is well watered during the greater part of the year.

### Climate.

The climate of San Diego county, as well as the soil, is quite diversified; in the western division, bordering on the sea, the air is mild and healthful, and can not be termed too warm. The purity of the atmosphere has become known to persons suffering from consumption and other diseases of the throat and lungs, who after a residence here of a few months, find relief, and often perfect a cure. The cool fresh trade winds of summer modify the heat and prevent malaria in any of its dreadful forms.

Diversity of temperature exists according to place and elevation, so that a climate may be found to suit any taste. On the Colorado desert the climate is exceedingly warm, while at Julian,

scribe them all, so will mention one, the El Cajon, which, through the kindness of J. H. Benedict, Esq., we were enabled to visit. The valley is located some fourteen miles from San Diego, and contains 18,000 acres of rich smooth land. The main valley is from five to six miles long and from three to four in width, forming a beautiful plain. From the principal valley run numerous branches or pockets, in themselves large enough for a small

that we have tasted. The apples were also of excellent flavor, and, to our surprise, resemble apples of the most favored locality in the Eastern States, as regards solidity combined with the acid taste, qualifications not to be found in fruit of many parts of California.

Changes also produce well, as is evidenced by the fine orchard of Mr. Chase, which equals any in the county. Olives seem to be a natural product

of the El Cajon valley, and it is surprising that, long ago, this favored valley had not attracted the attention of capital and energy, which, at the present, is concentrating there. It is to the credit of J. H. Benedict, and associates, of Riverside, that this beautiful valley is opened to the settlement of those who desire an excellent climate, in a country where all the semi-tropical fruits are easily grown. The proprietors have placed this land on sale at quite reasonable figures, and we think that the valley will become one of the most desirable ones in the State. The

### Bay of San Diego

Is one of the few natural harbors of the Pacific Coast. It is some twenty miles in length by three in width, and almost land locked, thus giving shelter to vessels while anchored in its waters. The entrance is 600 yards wide, with a depth of 22 feet mean, which is sufficient to float any vessel that may call at San Diego. The bottom of the bay, its entrance and approaches, are good, as there are no rocks to endanger the passage of vessels. On the shore of this lovely bay stands the

### City of San Diego.

Which slopes towards the bay, affording excellent drainage. This city has a population of 3,000 people.

Many new business blocks do credit to the city, and with the numerous handsome residences one sees, combine to give credence to the fact that San Diego has a progressive spirit. The public buildings compare favorably with other parts of the State; a \$55,000 court house, with its handsome gardens surrounding, is a pride to the town.

The Horton House, under the management of W. E. Hadley, is one of the finest hotels in Southern California, as it contains 110 rooms, which are bright, airy and lighted with gas. For those seeking a winter resort we can assure them that they will be well cared for by the excellent landlord.

Several other comfortable hotels and lodging houses may be found in different parts to the town.

The public school system is excellent, and the school house, a gift of Hon. J. Ross, is a fine building, nicely located, and commanding a fine view of the city and bay.

### Business.

San Diego has several representatives in the mercantile line, among whom are A. Schneider, who has a well-filled store, containing books, stationery, wall paper, paints, glass, toys, fancy goods, etc. He has been established since 1863.

C. H. Shepard also carries a fine line of books,



SCENE ON THE COLORADO RIVER.

situated in the foot-hills among the mines, the climate is all one could desire; at San Diego the weather is cool, tempered by the bay winds and occasional fogs. It is a noted sanitarium, where summer reigns perpetually.

### Land and Fruit.

The tillable land in San Diego county is not in one large body, as in most counties of the State, but is to be found in valleys, canyons and pockets, scattered all over the county. There are over 30 valleys, embracing from a few hundred to twenty thousand acres each. We have not space to de-

scribe them all, so will mention one, the El Cajon, which, through the kindness of J. H. Benedict, Esq., we were enabled to visit. The valley is located some fourteen miles from San Diego, and contains 18,000 acres of rich smooth land. The main valley is from five to six miles long and from three to four in width, forming a beautiful plain. From the principal valley run numerous branches or pockets, in themselves large enough for a small

colony. The soil is of the celebrated red land of California, very rich, easily tilled, and its qualities for retaining moisture are far better than any of the heavier soils, and is naturally adapted to the production of fruit, and especially the vine. One of the principal features of this lovely valley is the fine fruit produced without the aid of irrigation.



stationery, etc., and has, also, the news depot at his place of business on Fifth street opposite the Commercial bank.

The Consolidated bank of San Diego is a reliable institution, and has the confidence of the public. Bryant Howard is cashier.

#### Press.

The San Diego Sun and Union are both good papers, and are well supported. They are trying to make known the resources of the county, and are deserving of the high estimation in which they are held.

#### Real Estate.

Real estate is active, and among the leading dealers is the firm of Fairchild & Angier, who are located on Fifth street. We can recommend them to be gentlemen of integrity and good business qualifications, well informed upon real estate interests in San Diego city and county.

Joseph Paviro is also a large dealer in real estate, his place of business being on Fifth street, where he is to be seen during business hours.

#### Shipling.

San Diego is naturally adapted as a forwarding point, as she has communication every five days with San Francisco—482 miles distant—as Goodell, Perkins & Co.'s commodious steamers ply between these ports. The fare is \$15. San Diego is connected by the California Southern to Colton, and by the Southern Pacific, via Los Angeles, to San Francisco (543 miles), thus giving the pretty little town all the advantages necessary for the transportation of produce.

#### Statistics.

The latest records give the total value of San Diego's real estate, etc., at \$7,321,747, double what it was the year previous. There is also a marked advance shown in the amount of land enclosed, which is 5,162 acres, about one hundred per cent more than last year's report. The land cultivated is 22,997 acres, an increase of over 8,000 acres since the last report. There were 11,209 acres of wheat sown, yielding 420,490 bushels; 3,260 acres of barley, yielding 58,024 bushels; 8,125 acres of hay yielded 8,914 tons. In the county there are 149,286 head of sheep, from which were shorn the fine amount of 950,354 pounds of wool. Bees produce well, for during the past year, in 21,278 stands of bees, 246,989 pounds of honey were made. There are several thousand fruit trees of all kinds, both deciduous and citrus. These are in bearing condition as well as several hundred acres of vines, and more are continually being planted.

#### National City.

The next town in size, lies about four miles south of San Diego, and is the terminus of the California Southern Railroad. This is where the railroad shops, etc., are located.

National City is located on a fine level plain overlooking the south arm of San Diego bay. The railroad company are building a fine wharf to connect the terminal point with a line of their steamers to ply between National City and San Francisco.

The success of National City is due to Kimball Brothers, who do not leave a stone unturned to advance the interests of this section. We did not notice a squirrel in our travels over the National ranch, which, we suppose, is due to the use of A. R. Booth's patent squirrel poison.

The International hotel, located here, is a fine three story structure containing 30 rooms, all fitted up with elegant furniture; the beds are excellent and the table abounds in all the delicacies of the season. It is just the home for the traveler who is seeking either health, pleasure or recreation.

#### Press and Business.

The National City Record is edited and published by W. Burgess. It is a great help to the city and deserves good patronage.

There are several stores, livery stables, etc., all doing their quota of business.

Numerous handsome residences are to be seen here, as well as orchards of olives and oranges, all in fine condition and on the road to further prosperity.

Taking the train for Colton one passes through San Diego proper and Old San Diego, with its ancient adobe buildings and tile covered roofs. We contrast the old and the new town and notice what a change time has wrought, as the old town, in a measure, has gone to decay, while the new is constantly being improved.

#### Santa Margarita Valley.

We proceed, on the road, through Santa Margarita valley, which is a fertile body of land, the property of J. C. Flood, of San Francisco. It is supposed that in the future this section will be divided and furnish homes for thousands of inhabitants, who will improve and bring it into the high state of cultivation of which it is worthy.

#### Temecula Canyon and Town.

After we leave Santa Margarita valley, we enter Temecula canyon, one of the pretty and romantic spots of this lovely section. In the midst of this canyon lies the station of Fall Brook. Here is a picturesque dwelling spot, with grand scenery and game in abundance. One who is worried with the active duties of business could be well repaid by a

residence of a few weeks in this most lovely nook in San Diego county. After a ride of twelve miles Temecula is reached. This is a new town situated at the head of a large valley, of which the Pejal ranch is a part. It is here where large quantities of grain and stock are grown. Mr. Pomeroy, of Los Angeles, has recently subdivided and opened this section to settlement. Here large quantities of water are suitably located for irrigation. This gentleman has capital and energy, much that is necessary to a successful and permanent undertaking.

#### Mining Towns.

Julian is one of the principal mining sections of the county, and is surrounded by grand scenery. In addition to the mining it has agricultural advantages and a sanitarium for those afflicted with asthma.

Banning is also a mining town in San Felipe canyon, and contains several stores, hotels, etc.

Fort Yuma, which was established as early as 1849, is a mining town, and has the reputation of being the warmest locality in the United States.

#### Other Towns.

Bear Valley, Bernardo, Ballena, and Forest City are among the smaller settlements of San Diego county.

Taken as a whole, San Diego is a wonderful county, with great resources that await the sturdy emigrant and capitalist to develop, and which is well worth the effort which will so well repay them in the end.

#### OSTRICH FARMING.

Those of our readers who are curious to know something about ostrich farming will gather instruction from the remarks of C. J. Skitchley recently delivered before the Farmers' Club of New York city. This gentleman has had experience in the business at Cape Colony, in Africa. He furnished his hearers with the following statistics:

Feathers to the amount of \$6250,000 are exported from South Africa every year. Nine-tenths of these feathers are taken from tame birds. I hope to be able to convince you before I finish these remarks that ostriches pay considerable better than any other kind of live stock. The breeding is managed in the following way: A pair of birds, which cost at the Cape from \$750 to \$1,200, or what we call a set—three birds—are inclosed in a lot, varying in size from 40 by 60 yards in two acres. If the birds are in good condition they will soon begin to lay. Then the eggs are taken from them and put into an incubator for hatching. They will lay 30 eggs before setting, and, if well fed, begin again in two or three weeks. The number of eggs each bird will lay varies from 40 to 90 a year. One set of three birds, from June 30, 1871, to June 30, 1873, laid 189 eggs, which produced 193 chicks; of these 18 died, leaving 115 young birds. Of these 74 were sold at three months old for \$16 each, and allowing the remaining 41 to be worth only \$12 each, we have a return of £1,076 from one set of birds. The next year the same set laid 113 eggs, producing 77 chicks, and the first six months of the third year they laid 97 eggs, producing 81 chicks. The average increase is from 30 to 45 chickens a year from each pair. The chickens are worth, when a month old, from \$40 to \$50 each; a year old, \$100; two years old, \$150; four years old, from \$200 to \$250. At five years, when they begin to lay, they are worth from \$600 to \$1,000 a pair. The chickens require careful attention for the first three months, after which time, until breeding, they run in a flock like sheep, and mustered for plucking every seven months. Each pair of full grown birds will furnish feathers worth \$60 at each period of plucking, or \$120 worth every fourteen months. The white ostrich feathers bring in the London markets from \$120 to \$150 a pound. The diseases to which ostriches are liable are few.

#### DIVERSIFIED FARMING.

A correspondent of the San Jose Times believes in diversified farming in Napa and other parts of the State. He says:

Take the well-known Napa valley for instance; there the culture of the vine is creeping from the valley up the high-covered hills, higher and higher, even to the summits. And it is said that on the hills the vines grow even better than in the valley. Up, up the steep sides of the magnificent mountain of St. Helena, northward from Calistoga, the culture of the vine is bringing its blessings, though perhaps these blessings would have less drawbacks were they cultivated for raisins instead of wine. Where grapes can grow, however, the larger fruit must also be profitable. Even in many parts of Lake county, now given over to almost profitless sheep-raising and hay crops, it is probable that a concerted movement for diversified farming would ensure liberal returns. But as long as a contrary belief is prevalent in any locality, one or two men can not succeed in enterprises which need general concurrence to ensure success. Sheep farming and cattle-raising as main occupations in a hilly country, mean bad roads and few of them, no markets, illiteracy and intemperance. Life in such places is not worth living; but let a hundred or so in one such neighborhood undertake diversified farming, and a new and improved social order would arise.

#### THE HEART OF SACRAMENTO VALLEY.

Will, S. Green, the accomplished editor of the Colusa Sun, thus speaks, in the course of an editorial in his paper, of the future of Colusa county:

When we affirm that the Sacramento valley is to be the center of wealth and population of the Pacific Coast, and that Colusa county will be the heart of the Sacramento valley, we are only giving utterance to what we expect to see with our own eyes, although the fronts of 50 winters have passed over our head, 33 of which have been in the Sacramento valley. If we should vary from a long line of vigorous ancestors, and land, prematurely, a resting place by the side of the loved companion gone before, there are many, no younger, who will see the fulfillment of all we may here write.

Sixty miles from north to south, and twenty miles from east to west, is an unbroken valley of fine alluvial deposit. The small amount, proportionately, of tule lands are comparatively easy of reclamation, and the few alkali spots will soon disappear; but we have a thousand square miles capable of producing anything that man's necessities or man's caprices may destroy. The soil of the foothills is all rich, and will produce vineyards equal to the finest in Europe. The valleys in the foothills, and the mountainous portions of the county have a soil unequalled in fertility, and most of them have water for irrigation when needed. So that of our estimated 2,600 square miles, over 2,000 will see a fine state of cultivation.

Just on our northern boundary, Stony creek emerges from the foothills, after running 40 miles northeast, furnishing water for many a little valley and hillside orchard and vineyard. Here it will be taken in a huge ditch along the foothills for the entire length of the county, watering all the land between the foothills and the "trough" (where the overflow from the river and the foothill waters meet). It will not furnish water for all this land in the summer, but experience has proved that this land flooded in the winter will grow profusely anything that is planted, from the most delicate berry that can be grown to the hardy wheat plant. This will come soon.

Geo. F. Packer, one of the most practical and conservative common-sense men in Colusa county, is now moving in the matter of a ditch to be taken out of the river near the mouth of Stony creek and brought along side of the levee as far down as the town of Colusa. His idea is to make a levee and irrigation district combined—build a levee strong enough to keep the floods off the land and have another embankment on the west side to hold the waters of the ditch. The cost of winter flooding all this vast area of land will be comparatively nothing. In speaking with a practical farmer on the line of the ditch, he said he would rather have 100 acres set in alfalfa, that could have a certain flooding every year, than the whole 800 acres of his present farm. This plan affords cheaper irrigation than can be found in any other place in California, and the land is equal to any in the known world. Any of it will produce ten tons of alfalfa hay a year to the acre, besides pasturing for six months in the year. And the market for hay is not overstocked until all the nations of the old world have been surfeited with meal. Cheap and quick transportation is bringing every month to our door. This scheme now advocated by Mr. Packer, and others, will irrigate about 50 square miles of land, and when it is all done, a quarter section will be a big farm, and 80 acres the average. Over 500 families between Colusa and Jacinto. Dr. Glenn's big ranch will quickly melt into small farms, for it will become too valuable to think of planting to wheat or to anything that one man can manage on a large scale. In twenty years Colusa will have a rural, farming population of 50,000, and her towns and villages will contain as many more. It is the start at all these things that is slow of commencement. We thought it would start sooner—start before the much poorer region of the San Joaquin valley, but it so happened that some rich men turned their attention in that direction first.

#### A NEW FRUIT AND SHADE TREE.

We clip the following editorial from a late number of the Marysville Appeal, which is worthy of reproduction:

At a late meeting of the State Horticultural Society, Dr. J. Streitzel, who resides near Mortinez, Contra Costa county, recommended the general introduction of the pecan tree in California, the climate of which is said to be well adapted to it. The pecan wood is hard, the nut valuable, and the tree handsome, and free from all parasites which are so seriously threatening all the fruits of this State. The value of the nut may be inferred from the fact that the last year's crop in a single county in Texas, sold for about \$60,000. The only fault found with the pecan tree is, it is too slow a grower for fast California. It is like the orange, only a little slower, and does not bear until about ten years of age. Mr. Streitzel recommends that nuts for planting be obtained from dealers, in preference to getting trees from the nursery. The seed should be planted in a box of damp sand and transplanted first in March or April. A double row of trees planted around farms would make an excellent wind break, while furnishing a delightful shade. George Briggs, the pioneer fruit-grower of Yuba county, who owns an extensive fruit orchard and vineyard near Davisville, has pecan trees growing that are fifteen years old, and bearing abundantly. At the Rosebud orchards the pecan trees are also growing vigorously, as well as in other places in Napa valley. They grow without irrigation, and will thrive anywhere in the valley. As the seeds cost but a trifle, and the labor of planting can be done at odd times when the farmer is not busy, every farmer should plant two rows of pecan trees, so as to break the north winds.

#### THE LINCOLN POTTERY.

The Mining and Scientific Press, of recent date, discussed on one of Placer county's industries as follows:

In a recent issue we made mention of an important mining enterprise in western Placer, commonly known as the Lincoln coal mine; but among the various and important industries, under the head of mining, for which Placer county is justly celebrated, none holds a higher place among substantial and permanent industries than does the manufactory known as the Lincoln Pottery, situated at Lincoln, Placer county, and in the immediate neighborhood of the coal mine. Adjacent to the coal fields, of which we have heretofore spoken, is situated an old elevation of land, known as Rocky Ridge, which rises abruptly at its eastern extremity, from a comparatively level country, to the height of about 100 feet above the level of the plains. Its eastern end is about eight miles west of the base of the foothills of the Sierra Nevada mountains, and the ridge extends westerly about two miles, gradually sloping to a level with the Sacramento valley.

From the eastern and abruptly sloping end of this ridge is taken the clay from which the Lincoln pottery derives its manufacturing material. Here, perhaps, is one of the largest deposits of fine clay in the world. It is obtained, at comparatively no expense, by simply digging down the edge of the hill and hauling it to the works, about half a mile distant, on the California and Oregon railroad. Ages will not exhaust this deposit, which is from 20 to 30 feet in depth.

Messrs. Gladding, McBean & Co., who own the pottery, keep constantly employed a large force of men, which, together with the force at the coal mines, makes Lincoln a lively and flourishing town. Here are manufactured beautiful vases, urns, flower-pots and vessels of various designs. The principle manufactures, however, are ironstone sewer pipe, chimney tops, ear brick and terra cotta ware. In burning these articles, large amounts of wood are consumed, which also adds much to the welfare of this vicinity.

At the late Mechanics' Fair, among many interesting and beautiful articles exhibited as the productions of this pottery, was a magnificent large double antique majolica vase, which is a reproduction of one exhibited to the Metropolitan Museum, Central Park, New York, and which is known to be 2,200 years old. It was made to commemorate a princely marriage, and after the death of its owners was placed in their tomb where it remained for more than twenty centuries, until taken from them and sold to its present owners, the Messrs. Bruce, who loaned it to the above museum, where it was much admired for the unique composition of the vases, and as showing the degree of perfection attained in the ceramic art at that early period. As the original of this vase has never been copied, owing to the difficulty of making, joining, drying and burning so large a piece, and the lack of competent artists, Messrs. Gladding, McBean & Co., who have one of the most skillful workers in plastic clay in the United States, caused this reproduction to be made in order to show their artist's skill and give to the people of this coast an opportunity to see an unique and beautiful piece of terra cotta. Placer county should be credited with four big marks in mining enterprise, gold, iron coal, and last, but not little, terra cotta.

#### COST OF HOP CULTURE.

Several inquiries have been received at this office about the expense of planting a hop field. In order to supply this information we have consulted several hop raisers. Through information thus gathered we are able to present an itemized exhibit of the cost of planting, cultivating and curing an acre of hops. Ground rent and the cost of clearing are not included in the estimate:

Plowing and harrowing.....	\$ 5 00
Roots, 1,640 at one cent each.....	16 40
Poles, 820 at 2½ cents each.....	20 50
Setting poles.....	1 00
Twine and twining.....	8 00
Cultivating.....	15 00
Training, a common task.....	5 00
Succoring and stripping: twice.....	5 00
Total.....	\$75 60

Added to the above is the cost of picking, curing, bailing, etc. Estimating the first crop of an acre of new hops at 600 pounds of cured, packing would cost \$21, curing and bailing \$15, and there would still remain an outlay for shipping, commissions, insurance, etc. The outlay for an acre is \$114, and the return is 600 pounds of merchantable hops.—*Utah Press.*

#### STORAGE RESERVOIRS.

The Los Angeles Herald says: Were it possible to cover simultaneously the hills and plains of our county with a luxuriant growth of trees, it cannot be doubted that we should immediately receive an annual rainfall equal to that of some other regions situated in the same latitude. As the planting of trees in sufficient number to bring about the inevitable result must of necessity be slow, so it must be many years before we can depend entirely upon our rainfall. That our hitherto unbroken dry seasons will be interrupted henceforth by occasional rains is true, but the annual amount of moisture will not be sufficient for our agricultural needs. Therefore, for those of the present generation, at least, the necessity for storage reservoirs still exists. That these reservoirs, in some instances, will be costly, is a matter of course, but what is costly is not necessarily extravagantly expensive. There is a very considerable amount of land in this county now valueless because of a lack of water, and this land is an situated that it can, almost all of it, be reached by water from storage reservoirs.



### WILL THE FRUIT MARKET BE OVER- DONE?

A correspondent of the Los Angeles *Semi-Tropic*, thus discourses on the question of overstocking the fruit market:

It is often asked, "Will the fruit business not be overdone?" You might as well ask, "Will there ever be too much bread and meat produced?" You would say "No," most emphatically. Bread and the meat are produced in every country. But how is it with the fruits we produce in California. For instance, this is the place where the apricot grows to perfection. There are but few places in the world where the apricot grows at all, and even here in California it grows and does well only in certain localities. "And where is our market?" Everywhere in the civilized world. The demand increases faster than the supply for canned apricots. It is a matter of fact that the apricot is one of, if not the best of fruits canned. It is sought after not only in our own country but in Europe. Large quantities are sent to England and to all parts of the world, and the cry comes for more. And for dried or evaporated apricots the demand is much more than can be produced for the next twenty years. The dried apricot can be kept or sent to market two, four or six months hence, and

placed twenty car-loads of dried fruits. Last, but not least, comes the apple. It is one of the fruits that is next to bread and meat. It can be used in so many ways that it can not well be dispensed with. Everybody uses the apple in various ways—it is a part of the living. It is like all fruits, healthful.

Dried apples are used by almost everyone, and evaporated apples command good prices in every market. And good green apples in San Francisco worth \$1.25, wholesale, all last summer and fall. "Why is it?" One reason, there is a good demand. A great many thousand boxes are exported to New Zealand, Australia, China, Japan and many other foreign countries. In the upper country apple orchards, in many localities, have been neglected. The codlin moth have played and havoc with the apple orchards. Oregon does not send us apples as in former years. The Oregon orchards have been neglected, and in many places, abandoned.

Some have been of the opinion that we will produce too many oranges and lemons. But since we have an outlet east and lower freights we will find a good market at paying prices. Our oranges come into market after the Florida oranges have been marketed. Hence there is no danger of pro-

### ANTELOPE VALLEY, TEHAMA COUNTY.

The *Semi-weekly Tocsin*, published at Red Bluff, thus speaks of the productive capacity of one of its valleys:

We do not believe that there is a richer agricultural section in the State than Antelope valley. The soil is the richest alluvial, or loamy in character, and is capable of growing the choicest tropical productions. This rich soil is low enough to retain moisture, and yet it is high enough to be above the floods. Antelope creek, a living stream of sparkling mountain water, skirts the foot hills on the eastern border of the valley. This stream carries a large body of water—a sufficient quantity to irrigate every foot of land in the valley, if economically diverted. At present, this rich valley is almost entirely devoted to the cultivation of grain. We predict that this state of things will not last long. Antelope valley is entirely too rich and fraught with too many possibilities to grow grain. It is capable of growing crops that will return an hundred fold more than grain. It is capable of producing all kinds of berries, fruits, grapes or hops. Any of these will pay an hundred fold more than grain. Indeed, we have held to the opinion for years, that the time will come when grain growing will be confined to the plains. The bottom land

the river, is too valuable for grain production. There are thousands of acres bordering the river, belonging to such men as Blossom, Rawson, Tyler, Mooney, Ward, and on the Dye and Child grants, that is too valuable to grow grain. Time will prove this fact. But in addition to the rich alluvial soil of Antelope valley, it has irrigating facilities that presages a brighter future than that of any other section of the same extent known in the State.

### A RICH AGRICULTURAL SECTION.

The *Yolo Mail*, in speaking of Yolo county, says: It is capable of as great variety of crops as any section that can be found, from Siskiyou to San Diego. Our wealth consisted formerly of wheat, almost exclusively, until within the past few years we have found our lands more valuable for other purposes. Our wealth will compare with any part of the State. The last returns, of which we recollect, gave only one town in the State with a better health rate. We were second, Oakland being first. Yet the tide of immigration flows southward from San Francisco as regularly and as constantly as our



CONSERVATORY IN GOLDEN GATE PARK, SAN FRANCISCO.

the freight is nominal, compared to the freight on green fruits. And what is said about apricots can be said about other of our fruits—the French prune and nectarine. The nectarine does not do well only in portions of California. It is good for canning, and especially good for drying. The French prune is particularly good for drying, and always commands prices that pay the producer a good profit. Then the Bartlett pear is wanted to ship east to Chicago, St. Louis, and further east to New York, Philadelphia, Boston, and from these places to be distributed to almost every city and town in the United States. Then the demand for canned Bartlett pears is enormous, and the canneries want all the good Bartlett pears they can obtain. And the market for dried Bartlett pears is good. But other pears are wanted, for shipping East, at remunerative prices. Then certain varieties of peaches are wanted, and the canneries take all the good Early and Late Crawford, the Lemon Cling, Orange Cling, White Heath Cling, Salway and a few other varieties of peaches. And still, notwithstanding that there is such large quantities of peaches canned, the demand is not supplied. Then for dried peaches the price is good. Mr. Hixson, of San Francisco, was a month in Los Angeles and San Bernardino counties trying to get three car-loads of dried fruits, but all he could procure was 8,000 pounds. These two counties should have pro-

duced more oranges than can be sold at good prices. And if we produce good lemons, there will be a market for them also. As to producing too many raisins, that is out of the question. We have the world for a market, and our raisins are wanted wherever known. There is, at all times, a good market for canned or dried fruits, and there is no question but that those who will devote their time and money to fruit-raising will realize greater profits than the farmer who produces barley, wheat, corn or other farm products, he better paid in every way, and where the best varieties are planted, three or four times the profit. And at the same time the labor is lighter, pleasanter, and I might say, more elevating. I have scarcely glanced at the facts in the case, as regards fruit-raising. As a matter of fact, the fruit business is only in its infancy yet in California, and the most sanguine can not realize what the fruit interests in California will be in ten, fifteen or twenty years hence. There will be 100 car-loads of green and dried fruits go east and to foreign countries to where there is one now. At some future time I may give more facts and figures to prove beyond doubt that the fruit business can not be overdone.

### CROPS.

The condition of the growing crops, according to the *Butter Farmer*, is all that could be desired.

is too valuable. And Antelope valley land is rich enough to grow the most choice products of the soil. It is only a question of time when men with experience will come and elbow the grain growers of Antelope valley out of the way. When that time comes it will be a blessing to Red Bluff, for then the land will bring forth its full productions, and ten families will be able to live handsomely where one is struggling now. We do not know how land rates in Antelope valley, but if the same rich land, with its irrigating facilities, was in Napa, Solano, or Sonoma counties, it would be worth from \$300 to \$500 per acre. If the land will not command these figures now, it is only because it is not farmed up to its highest capacity. In the counties named they are in advance of us, and they cultivate the kind of crops best adapted to the soil. It is only a question of time, as before remarked, when a new class of farmers will settle in Antelope valley, for they will make it too valuable for the old fogies to stand the temptation. It is now settled almost exclusively by grain growers—farmers who know nothing else—and when the men come who know the value of fruits, vegetables and berries, the grain growers will be crowded out. The old settlers will then learn it is more profitable to grow grain on land worth only \$35 per acre, than in Antelope valley, where land is worth \$300 per acre. Around Tehama, and in fact all the bottom land bordering

river flows to the bay. There can be but two reasons for this. One, and perhaps the principal reason is that we have no place for skilled labor here. We have never developed one portion of our system. We are like a mature man on one side, and on the other still an infant. Manufacturers would call around us a desirable class of wealthy creators, and enable us to retain our money at home that we gather year by year, from our agriculture.

### THE RAISIN CROP.

The consumption of raisins in the United States is increasing rapidly. Peter Wyckoff, a large foreign fruit broker at No. 54 Broadway, New York, says:

"Valencia raisins are an enormous crop this year; there is a heavy consumption in the United States, exceeding anything known heretofore. The importation has exceeded one million 28-pound boxes; yet six hundred boxes of Malaga have gone into consumption also."

As the California crop this year ranged between 100,000 and 150,000 boxes it hardly becomes a circumstance when compared with the 1,600,000 boxes imported from Europe. It will be many years before California produces an amount equal to present home consumption.—*Revere Press*.



# VALUE OF FARM LANDS IN SAN LUIS OBISPO.

Our readers have noticed the many sales of real estate in this country, reported in the *Tribune*, during the past few months, and the prices paid. The prices have quite astonished the old settlers, and so great has been the advance that the newcomers and untried have to pay for the same land, the prices are reached, and a reaction must follow. People of this class visited San Luis Obispo year or more ago, in search of land to buy, but finding the rates higher than had been reported the year previous, were deterred from purchasing; but, coming again, and finding many dollars added to each acre, again went away, without becoming the owner of any land. This they will probably continue to do for years to come, meeting with the same surprise, going away with the same disappointments, and expressing the same regrets that they had not made their investments in time. Even here, where all should rejoice in the enhanced value of property, there are wise (?) men, who dutifully shake their heads and say "prices are too high." Let us compare the prices paid for land in this county with those paid in other parts of the State and elsewhere. Here good wheat and dairy land in the coast region sells at from \$10 to \$25 an acre, and east of the Santa Lucia range from \$2.50 to \$10. In some small lots near town, or in the Arroyo Grande bottom, or otherwise favorably located, higher prices are asked. The profits of farming need not be mentioned in detail here, but it is enough to say that no more productive land exists in California. Here the farmers are prosperous, and becoming more wealthy every year. In Butte county, we see large farms, at from \$80 to \$120 an acre; in Alameda county from \$100 to \$500, and seldom do farms in the northern counties sell for less than \$50 an acre. In the State of New York, farm land is held at upwards of \$100 an acre. The most valuable are the dairy farms, and their product brings much less than the product of the dairy farms of San Luis Obispo. The wheat yield of the New York farms is not half as much per acre as the yield in this county. The long winters of the East are much more damaging and expensive to the farmer than the dry season in this State. These are advantages in favor of our farming lands, and until our prices have equalled and exceeded the rates at which land is held in that State, they cannot be said to have reached their highest. In fact, it would be a difficult matter to tell what is the real value of the productive soil of this county. There are farms that have produced \$100, and as high as \$140 per acre to their owners in the past year, and yet if \$80 an acre was asked for the land, people would open their eyes in amazement. The axiom is that a thing is worth what it would cost to replace it. That is good wheat land can be got in Washington and Dakota Territories, is quite true, but the lands of this county will produce what the lands of but few sections of the United States will. These lands cannot be replaced anywhere out of California in the United States. There are, therefore, none with which a fair comparison can be made. Here, with our untimely climate, the certainty of crops, the great ocean to secure for ever cheap transportation, and the prospect of railroad connection with the great lines of the country at an distant day, we may claim the most favored locality of the most favored State in the Union, and our lands worthy of the highest rates that dare be asked anywhere.—*San Luis Obispo Tribune*.

## SUBDIVISION OF LARGE RANCHES.

We take the following, which is a movement in the right direction, from the *Los Angeles Express*: We are told that the San Joaquin rancho, near Tustin City and Santa Ana, is now being subdivided and sold in small tracts. This rancho originally comprised 48,000 acres, and only a small portion of it has been sold to settlers. The greater part of it is very fine land, and this movement will no doubt rapidly "double up" the population of that section of this county. It is in every way a desirable locality. The climate is excellent, the soil is rich and adapted to the growth of vines and fruits, as well as for general farming purposes. It is also in close proximity to a small but practicable harbor, and the settlement of those lands will no doubt hasten the extension of the Southern Pacific Railroad to a station several miles distant, if not in a connection with the California Southern near San Luis Rey. The movement will also hasten the subdivision and location of other lands beyond, until the goat work reaches the celebrated Santa Margarita ranch in San Diego county. Lands that are suitable for tillage are becoming too valuable in Southern California for sheep pastures. We may therefore expect that the flocks and herds will, at no distant day, be driven to the mountains, and those that remain will be improved in their breeds, held in smaller numbers and sustained on cultivated feed. Los Angeles, with her mild climate and soil, will move her vine-clad hills and plains more famous than those of France, Germany or Spain, and her title of "cow country" will be only a term of the past a millennium, as it were, to mark how far the country has traveled on the highway of advancement.

Special for the Resources of California.

## STOCKTON AND THE SAN JOAQUIN.

The *Independent*, in comparing its leading town and county with other portions of the State, says:

Many times persons residing at Stockton, or at other points in San Joaquin county, have left for other places in California, or neighboring States or Territories. In the majority of instances, they have returned to "old San Joaquin" again, perfectly satisfied to remain no more. A gentleman who has lately returned from an extended trip throughout the coast and several middle counties of the State says that no town that he visited, displays so lively a business aspect as Stockton. It is the center of men to be dissatisfied occasionally, and desire a change, but few, if any, who have left this section have bettered their condition in any particular. During the past three years, no place on the coast can boast of more extensive or lasting improvements, and these improvements have been made only when necessity demanded them. Stockton is the peer of other places in general intelligence and general morality as well. Much is said in various sections, regarding climate and the health of the people. Statistics prove Stockton entitled to a place among the few leading cities, in point of health, in the whole world. Strong men, beautiful women, and armies of rosy-cheeked children will testify to the truth of this statement. Where is there a place of this size that can boast of more wealth, or more manufacturing, or commerce? Men sometimes talk about money matters being "tight," but the place is yet to be found where money matters are not "tight" to men of moderate means. There are, however, seldom cases of poverty requiring aid from the charitable, or where relief is withheld, if needed. Taking everything into consideration, the residents of Stockton and the San Joaquin have no need to grumble, and, in fact, there is very little discontent here. The industrious and intelligent farming population realize fully the productiveness of the lands they cultivate, and are generally well-to-do, many being wealthy. Generally the people are not quick to take up with outside ventures, and when delightfully-colored accounts of some blooming Eden in the distance reach us, we gaze incredulous upon the broad extent of the San Joaquin, with its beauty, natural advantages, and productiveness, count over our cattle, and friends, and children, and remain right here.

## GRAPES AND RAISINS.

About twelve miles from Auburn, in a westerly direction, there is a district of country that has proved to be very prolific in the production of the raisin grape. Mr. W. Foster and Mr. F. Arndt have, for several years raised a very superior quality of grapes, and have been very successful in the manufacture of a superior quality of raisins, which they have been able to sell at very remunerative prices. During the last few years several others have engaged in the business, and have been equally successful. The success of these already in the business appears to have created a desire in a number of others to make a venture in the same direction, and at this time that portion of the county is almost alive with people planting out grape vines. Mr. James Cartwright, who already has a small vineyard, is planting 30 acres in addition to what he has already got. The Job brothers are planting 40 acres, and Dr. Mannum will plant 10 acres this spring, and contemplate planting 40 acres more the spring following. Mr. Charles Gladding, of Lincoln, is also engaged rather extensively in this business, being now employed in planting 80 acres. Most all of the vines now being planted by the above-named gentlemen are of the rubish variety. Judging from what has already been done in that part of Placer county, we feel warranted in saying that when the vineyards now being planted get fully to bearing, that that locality will be prized for its superior production of both grapes and raisins.—*Placer Herald*.

## A NEW KIND OF BARLEY.

The *Reno Gazette* says: The Mendeny barley is a new variety, and likely to become popular. It is six-rowed, and was sent out by the Department of Agriculture four or five years ago. It originated in Canada, and has long, heavy heads, which hang down with billings, but its straw is so strong that it does not fall down, even on the richest land. It has been treated for malting, and pronounced superior for that purpose. In ripening, it is a little later than the common six-rowed, and is easily distinguished from that, when growing, by a slightly reddish tinge to the beard when the heads appear.

## CALIFORNIA'S FUTURE.

We take the following extracts from the *London Telegraph* of December 25th, 1892:

At this moment Princess Louise and her husband the Marquis of Lorne, are doubtless accumulating materials in San Francisco which would enable them to render an answer to the question propounded recently in his "Wanderings in a Western Land," by A. Fenwick Wilson, M. P., "Will California, with all its surprising natural advantages, fail to become the happy and envied home of a contented and prosperous people? We can readily imagine the first impulse of the illustrious guests on a visit to San Francisco will be to express astonishment that such a question should ever have been put. From what they have seen of California, the Governor General of Canada and his royal consort may have been tempted to conclude that no land exists upon earth, the prospects of which are more favorable. Any amount of dry and uninviting statistics might be adduced, to prove what the mineral and agricultural wealth of California is. The State is more than large enough to make an empire in itself, as its agricultural area exceeds that of the United Kingdom, or of the entire peninsula of Italy. There are 10,000,000 of acres within its confines which are at the disposal, and as much land again which presents the greatest facilities for stock-raising and fruit-growing. In addition, there are mountain pastures which, in years of moderate rainfall, are capable of producing an amazing quantity of superior meat. Laying together her metallic production, her fruits and vines, her sheep, cattle, horses, and mules, California, with an acreage almost equal to that of France, and with a climate which, subject to the accident of rainfall, may be pronounced favorable, must surely be destined to afford happy homes to twenty times as many human beings as the 1,000,000 human beings with which it is now tenanted.

## COPPER IN CALAVERAS COUNTY.

Copper mining is one of the resources of Calaveras, and the San Joaquin and Sierra Nevada Narrow-Gauge Railroad will, unquestionably have the effect of stimulating effort in that field. Already signs of new life are visible in the copper mines of Campo Seco, the northern extremity of the Calaveras copper belt. An extensive copper formation along the western verge of the foothills was thoroughly explored more than twenty years ago, and nearly \$5,000,000 worth of ore has been taken out from the mines at Copperopolis alone. The ore extracted was of sufficient value to warrant transportation a distance of 35 miles by teams, to tide-water, and its shipment to Wales, for reduction. There is still any quantity of ore, of grades inferior to that shipped years ago remaining, and which only awaits cheaper means of transportation to enable parties to handle it with profit, and, sooner or later, every pound of it will be removed.—*Calaveras Chronicle*.

## THE WINE-GROWING REGION OF OHIO.

A very intelligent Californian, who lately visited the wine-growing portion of Ohio, in the vicinity of Sandusky, informs us that the grapes raised there find a very ready market at \$125 to \$150 per ton. Here the price is \$20 to \$30 per ton. This gentleman says that vines twenty years old there are not as large as two-year-old vines in California. The thinness of the soil, too, impressed him. He says it is but eighteen inches to two feet deep, and below that depth there is a solid bottom of limestone. The wine finds ready sale at \$12 to \$18 a case, at retail. The point which most struck our informant was the care exercised in making the wine. Every detail was as closely attended to, as though, if even the smallest point were neglected, the wine would be no better failure.—*S. F. Real Estate Circular*.

## A RAPIDLY-GROWING TOWN.

The Santa Ana Herald, in speaking of its town, says: In 1872 this town was laid out, a shanty or two being the extent of its improvements, and the town scarcely commenced to grow until the year 1875, some seven years since. It has far outstripped all the old settled communities, established before Santa Ana was ever thought of, which, we think, goes to show that we not only have the proper location for a large town, and are rapidly building it up, but that we have the country surrounding it, rich in agricultural and horticultural production, thickly populated, and contributing to make this one of the largest, busiest, and most prosperous towns in Southern California. The Santa Ana valley, including the towns of Santa Ana, Orange, Tustin, Westminster, and Garden Grove, now contains a population of at least 6,000. The wonderful growth in population and improvement, since this valley first attracted notice, is something almost phenomenal. It has few parallels.

OPPOSITE UNION SQUARE,  
THE LEADING  
Commercial School  
ON THE COAST.  
LIFE SCHOLARSHIPS  
—FOR—  
Business Course. Only \$70.  
NO VACATIONS.  
Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Beautiful Location.  
Fees Admitted.

Special Inducements Offered to Persons of Neglected Education.

Business Course.  
Academic Course.  
Combined Course.  
Penmanship Course.  
Modern Languages.  
Photographic Course.  
Special Branches.

For Further Information call at the College Office  
No. 320 POST ST.,  
Or Address the Proprietors,  
CHAMBERLAIN & ROBINSON.  
FOR SALE.  
Large Dwelling House and Out Buildings,  
(Cost, \$2,000.)  
AND 40 ACRES OF  
SPLENDID GRAVEL LAND,  
Within a mile and a half of the town of Orange. Price, \$4,000, or \$4,166 with water stock.  
MAONIFOCENT ORANGE AND RAISIN Land; also adjacent tracts, at from \$35 to \$65 per acre, in tracts of 10 acres to 360 acres, or intermediate sizes.  
This land has just been purchased at a low price, is a large body, for cash, and subdivided into twelve tracts, and is offered for sale in lots to suit, at reasonable rates, to give a quick return on the investment.  
Part of the land, priced at from \$35 to \$37.50 per acre, is  
HEAVILY WOODED,  
And, on account of the abundance of the water and can be irrigated from the Santa Ana River directly, and without the necessity of purchasing water stock which can be had at \$11.15 per acre. The most successful Vineyardists irrigate only in winter.  
TERMS:  
One-half Cash; Balance, One and Two Years; Interest, 8 per cent. per annum.  
All the land is in the Rancho Santiago de Santa Ana, which extends from the mountains to the sea, on the north of the waters of the Santa Ana River, at the northern boundary, and contains the flourishing settlements of Orange, Santa Ana, and Tustin City. The Orange section has the first premium wherever entered, even at the Riverside Fair. Apply to  
M. L. WICKS,  
86 & 87 Temple Block,  
LOS ANGELES, CALIFORNIA.



**A NEW CURRENT.**

Are they grapes? No, certainly not; the picture shows a branch of a new variety of red currant called "Fay's New prolific," taking its name from the originator, the late Lincoln Fay, of western New York, and the variety is a seedling of the Cherry and Victoria varieties. The new root was not given to the public until after he had cultivated it for eight or nine

**FRUITS FOR CANNING.**

Joseph Wallace, of Riverside, writes to the *Rural Californian* as follows:

In compliance with your request, I herewith send you a list of what I have found to be the most satisfactory varieties of fruit for canning. My experience has been confined chiefly to the peach and apricot. We are greatly confused here on varieties of apricots, in consequence of

respect. And it matures at a time when most other varieties are out of season, filling the space between the earliest and the latest, and allowing a better choice of handling.

The Bartlett is the only pear I have found fit for canning. The past season I have used a large quantity of French, German, and Hungarian prunes; also green and blue gage plums, all of which are first-class. In fact, all of our

it is at a useless expense of time and labor, and is, moreover, apt to be neglected.

**WHERE TO FIND HOMES.**

Immigrants arriving in California should note the fact that Butte county possesses every advantage to those seeking to establish permanent homes. We have good, healthy climate; excellent land, with abundant irrigating facilities,



**FAY'S PROLIFIC RED CURRANT.**

years, alongside of all the popular varieties, and became convinced of its superiority. For 30 years, we are told, Mr. Fay enthusiastically endeavored to produce a red currant which would combine the size of the cherry currant with the prolific bearing qualities of some other variety; it being a fact that the cherry currant heretofore has been grown the largest, and, though bringing more money per quart, its bearing qualities have not made it profitable for the Eastern grower. In California, however, the cherry currant has made a fine record, and is the variety chiefly planted. There is abundant testimony that Mr. Fay has originated a variety which is greatly superior to the cherry currant at the East, and, no doubt, California growers will be quick to give it a trial.

It is certainly a magnificent fruit in size and heavy bearing. Its color is a rich red, and those who have grown it at the East say that it has a spicy flavor with much less acid than the cherry currant. It has a space of naked stem between the upper berry and the attachment to the bush, which largely reduces the cost of picking, and prevents the crushing of upper berries in the work.

The engraving, for which we are indebted to C. M. Silva & Son, of New Castle, Cal., who are introducing the variety to California growers, was made by the *Rural New Yorker* from a branch grown in Chautauque county, New York, and we are assured that it is an exact representation of the sample. It will be interesting to see to what size it will grow in California.—*Rural Press*.

our trees not being, in many instances, true to name. Have found Royd, Large Early, Peach, and Heinskirke, the best varieties. My only objection to Moorpark is its irregularity in ripening. All yellow peaches are good for canning. Burgen Yellow, Crawford's Late, Smoek's Late, and Sulway are superior.

For several years the Lemon Cling has been highly recommended. Its test during the past season proved it to be all that is claimed for it. I consider it the best peach we have, in every

plums, prunes, and nectarines are in every way desirable, and of first quality. In planting peach trees, I think we should avoid using those varieties affected with curled leaf, as there are plenty of good varieties which are free from this defect. Overbearing varieties might also be rejected, as the trees called shy bearers are sure to prove more satisfactory, any of them bearing sufficiently heavy. If a tree bears too heavy, the fruit is small and worthless; or, if thinned out while the fruit is young,

ties, for the growth of grain, vegetables, flowers, and fruits of the semi-tropic and temperate zones; low rates of taxation; an efficient public school system, with school-houses enough to accommodate every locality; fine church structures, and many eloquent and able ministers of the different denominations—in fact, everything desirable. Land is not high just now, though it is appreciating rapidly in price, and those who buy now will be sure to grow wealthy in a few years, from increased value upon investments, in this country alone.—*Oroville Mercury*.

**ITS GEOGRAPHICAL POSITION.**

The *Commercial World*, of this city, in reviewing the future of the Pacific Coast, says:

In geographical position—that is to say, in its relation to other countries—this coast is peculiarly fortunate. It stands like a half-way house on the shortest and most natural highway between the rich and semi-civilized nations of Eastern Asia, and the Caucasian peoples occupying this country and Europe. The possibilities of forming an indispensable connecting link in the grand chain of commercial interchange are almost incalculable, so perfectly, in respect of natural advantages, does the city of San Francisco resemble the Venice of the Middle Ages—the great entrepot of the period between Europe and Asia. The comparison does not need to be dilated upon, for it is evident. We trust that our men of business will seize the point, and make the comparison yet more striking.



## BIG BONANZAS.

## Financial Statement of Two Hydraulic Mines.

The North Bloomfield and Milton hydraulic mining companies, operating in this county, have made their financial statement for 1882. From them we gather these figures:

## North Bloomfield.

Receipts—	
Gold bullion.....	\$386,140 23
Water sales.....	2,899 12
Dividends from branch company's.....	43,864 50
Personally reduced.....	4,069 80
Total receipts.....	\$436,000 65
Disbursements—	
Bonds redeemed, 106.....	\$106,000 00
Interest on bonds.....	37,076 49
Expenses of mining.....	153,714 03
Dividends.....	133,000 00
Total disbursements.....	\$430,790 52
Increase in cash assets.....	4,210 13
Showing net profit in working the North Bloomfield mine proper of \$235,331.32.	

## Milton.

Receipts—	
Gold bullion.....	\$416,044 17
Water sales.....	1,425 66
Personally reduced.....	11,750 09
Total receipts.....	\$429,220 92
Disbursements—	
Bonds redeemed, 50.....	\$50,000 00
Interest on bonds.....	12,873 83
Improvements on other property.....	12,908 07
Expenses of mining.....	236,592 63
Dividends.....	8,424 00
Total disbursements.....	\$400,798 53
Increase in cash assets.....	27,422 39
Showing net profit in working the Milton mines of \$180,877.80.	

As these properties are among the leading hydraulic gravel mines in the State, the following tabular statement, showing their operations for the past six years, will be of interest:

	Bullion Product.	Water Sales.
1877.....	\$670,774	\$ 1,754
1878.....	819,050	9,064
1879.....	794,518	9,091
1880.....	665,711	12,205
1881.....	607,092	24,233
1882.....	802,100	4,325
Totals.....	\$4,419,911	\$66,491
	Net Profits.	Dividends.
1877.....	\$304,015	\$5,000
1878.....	501,181	481,408
1879.....	412,285	425,540
1880.....	214,075	165,396
1881.....	325,247	.....
1882.....	416,249	223,224
Totals.....	\$2,243,558	\$1,290,058

These mines were closed for four months during the year 1881, which accounts for the small product for that year. At the beginning of 1870, the two companies were in debt over \$1,000,000. Since then this debt has been reduced to \$344,000. These payments and interest on this indebtedness chiefly account for the above discrepancy between profits and dividends.—*Nevada City Transcript.*

## ARRIVAL OF GOVERNMENT CARP.

Private enterprise brought the carp to California, and carp growers, of whom there are now hundreds in the State, should never forget the perseverance and enterprise of the late Mr. Poppe, who, at a cost of great labor and personal sacrifice, succeeded in bringing a half dozen fish through from Germany alive, while many perished on the way. From the handful brought by Mr. Poppe most of our ponds are now stocked, although during the last two or three years the U. S. Fish Commissioners have sent out a large number of fish for distribution.

The largest shipment of carp to this coast arrived on Sunday afternoon in the palace car of the United States Fish Commission, which left Washington with 19,000 fish, mostly carp. Besides the carp, there was a number of Japanese gold fish. Coregonids of the fish were distributed on the way out, and many of the fish here at present will be sent to Oregon, Nevada and some of the Territories. They are all in good order, and are contained in small tin buckets, holding each 20 fish. They were kept in their native water, which forms the carp propagating ponds at Washington, until Dallas, Texas, was reached, where the water was changed, and again at Denning, N. M. The car is in charge of G. H. H. Moore of the United States Fish Commission; James Caswell, of Scotland, a fish expert, who, on his return to Washington, will go as specialist in charge of shad-hatching to the London Fish Exhibition; F. L. Donnelly, another fish expert; D. W. Wood, Daniel Leech (corresponding secretary of the Smithsonian Institute), and Wm. Dandridge as steward of the car, accompanied Mr. Moore on his overland journey.—*Pacific Rural Press.*

## OUR LARGE RANCHES.

About a dozen large ranches are left in this county, and there appears to be a disposition, on the part of the owners, to subdivide these, or such portions of them as are suitable for small pieces, to be cultivated. The demand for tillable lands is such, at the present time, as to offer a strong inducement to the owners of large tracts to "let go" of them. We are told that a movement is now on foot for the subdivision of the San Joaquin ranch, which contains some 18,000 acres. It lies in the southern portion of the county, and has all the advantages of soil and climate.—*Los Angeles Express.*

## THE STATE UNIVERSITY.

In the report of President Reel, of the State University for 1882, we find the following suggestions and recommendations, which are worthy of consideration: The needs of the University are many and great. First among them, and including most of them, is the need of a large endowment. The University was planned on a large, perhaps an ambitious, scale. Not content with the typical New England college in which the ancient languages form the basis of the education given, the founders of the University of California determined to offer at once to the people of this new and thriving State, all the educational advantages that New England has been two or more centuries in developing. The plan is good, but its very extent will prove its greatest weakness, if it is not properly administered. It is one thing to maintain efficiently a single college with a single course of study, varied only by electives within the course, but quite a different thing to maintain with equal efficiency an aggregation of colleges or a university. Our corps of instructors is larger than would be necessary for a single college, either of letters or of science, having even a larger attendance than the University now has, and our income is enough to pay such a corps of instructors more nearly adequate salaries than are now paid. But instead of one superb college we have many. Now, what our doubts there may be regarding the wisdom of so extensive a plan for a community so young, we are committed to this broad policy, and it behooves us to carry the work to a successful issue. Indeed, there would seem to be special reasons for believing that there is in California, if not an immediate need for a University on this broad basis, certainly a field for the development of such an one. It would only be commensurate with our material resources and prosperity, and a fit supplement to them. Indeed, I am of the opinion that, as a purely commercial enterprise, the ample endowment of the University would be a wise investment. We have only to add to our material advantages the best educational advantages to make the attractions of our State equal to those of any State in the Union, in the eyes of people that we should most care to have settle among us. No material advantages compensate, in the eyes of a desirable population, for the loss of educational opportunities. And, as regards our educational possibilities, we have in some respects advantages over old Eastern institutions, in that we are not hampered by narrowing traditions. Now the first and prime essential to the proper development of our University is a Faculty learned enough and large enough to give as good instruction and as able guidance as can be had in all the branches of study usually found in colleges of science and the liberal arts. To retain such able and learned men, and to secure others like them, good and stable salaries must be paid; salaries that compare favorably with the earnings of successful men in the professions of law and medicine, and there must be withal a feeling of confidence in the stability and permanence of the institution; a feeling that whatever fluctuation of opinion there may be on matters of State policy or local interest, the University will always be the center of a common interest, and the common object of a hearty and liberal support.

## FRUIT LANDS.

The San Joaquin valley, at a not far distant day, will rival any other section of the State in the production of fruit. The soil and climate seem peculiarly adapted in many varieties. The peach, plum, apricot, prune, and fig flourish, and bear extraordinarily. They are free from all kinds of pests and diseases that retard production in other sections of the State. In Stanislaus county but very little attention has been paid to this very profitable business. Many reasons are assigned. The country is comparatively new, and, on account of the low price of land, and the cheap manner in which it could be sown in grain, men did not wish to engage in a business attended by considerable care and expense. Again, it has been generally believed that fruit and vine had to be irrigated. Experiments teach that this is not necessary in the rich bottoms of the Stanislaus, Tuolumne, and San Joaquin rivers. Mr. Stephen Rodgers, an enterprising farmer, is putting out an orchard and vineyard which, in a few years, will rival any other in the State. He has already 14,000 young trees growing in a very healthy condition. He will add about 2,000 more this year. He grows his own seedlings and does his own grafting, so he is certain to have the very best varieties and most healthy vines. He will this season put out 10,000 vines. His experiments tend to show that grapes grow entirely too thrifty on the first bottom, but that the second would be better. He measured one vine that grew 21 feet in one season. He intends to increase his orchard and vineyard until each covers 100 acres. More farmers, who have proper lands, should engage in this business. They would then have no fear of dry weather. All kinds of fruits bring a high price in this section of country, particularly the apricot, peach and prune. They can not be produced with any satisfaction in but few sections of the State.—*Stanislaus County News.*

## A THRIVING TOWN.

Our bustling neighbor, Livermore, has a number of go-ahead men, who are lifting the importance of that place along at a lively rate. Brick blocks have been built, a bank will be opened in April, the streets have been graded and gravelled, a wooden mill is now being seriously considered, and a fortune lies hidden in the thousands of acres set out in grapes. There was shipped by Wells, Fargo & Co's express, the past six months, \$85,811 24. May the City of the Plains continue to flourish, and ever reign queen of Livermore valley.—*Haymarket Journal.*

## FARMING LANDS IN CALAVERAS COUNTY.

From a late issue of the *Calaveras Chronicle*, we take the following, in reference to the farming development in a portion of this old mining county:

Throughout the central portion of the county, where placer mining was most extensively pursued in early days, there is quite a large area of arable land. The inclinations of many of the rolling hills, or alluviums, of the Sierra Nevada mountains are gradual as to permit the husbandman to till them without difficulty, and the many cozy, well-sheltered little valleys bordering upon the mountain streams, are among the most inviting and productive lands in the State. Time and experiments will reveal the fact that these lands immediately below the snow belt are infinitely adapted to fruit culture, more particularly the apple, pear, and grape, than the valley. A great future undoubtedly awaits that region in the development of the agricultural and horticultural capabilities of the situation. That fruits attain rare perfection on these mountain terraces and in the little valleys nestling close to the flanks of the rugged, snow-clad mountains, which nature has provided as a great reservoir to hold back abundance of water until it is needed to alleviate the thirst of the arid soil, has already been demonstrated. The produce of the plains in the way of table grapes and wine, is greatly inferior to that of the higher lands. The quality of the pears produced on the red soil along the broad river, extending in a northerly direction through the county, is very superior; and as for sound, fully-developed finely-developed, finely-flavored apples, Californians will have to procure them from mountain orchards if they obtain a home product of the first quality at all.

The present industrial prospects of the county are brighter and of a more encouraging character than they have been for many years past. There has been during the past year an extraordinary inquiry for mountain lands. Contests over claims are numerous in both the United States Land Office in Sacramento and Stockton. The northern portion of Calaveras is embraced in the Sacramento Land District and the southern portion in the Stockton District. Astonishing as it may appear, the poorest foothill land in the county—the district immediately west of the airiferous belt extending from the Stanislaus river, on the south, to the Calaveras river, on the north—is now sought for with avidity. A large share of these lands can be irrigated from the canals constructed to convey water to the miners in early days. Twelve years ago there were about 45,000 acres of lands inclosed by fences; now there is four times that area fenced, and many quarter-sections homesteaded and pre-empted, the lines of which are only marked by the surveyor's stakes.

## LARGE AND SMALL FARMS.

The advantage of small farms, not only as tending to insure personal independence and national wealth, but to augment national production and wealth, was very effectively illustrated by General Butler in his address at the recent International Dairy Fair in New York, by a comparison of the agricultural statistics of France with those of the United States. With a total area but little larger than that of the State of California, and much less than that of the State of Texas, but all divided up into small freehold properties, and every acre improved by careful culture, France, besides her wine, cereal fruits, raw silk, and other special products, raises more wheat, barley, rye, oats and buckwheat than all the United States, nearly as many horses and neat cattle, more sheep, and more than one-third the quantity of swine. Such comparisons teach us the wisdom of the policy that in France, by the subdivision of the land, has made so large a proportion of her people freeholders and farmers.—*Contra Costa Gazette.*

## J. D. SPRECKELS &amp; BROS.,

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS.

325 Market Street,

SAN FRANCISCO.

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the

## STANDARD SYRUP,

A SUPERIOR ARTICLE,

Put up in Barrels Expressly for Home Consumption.

ALSO,

## EXTRA HEAVY SYRUP,

In Barrels for Export.

## REFINED SUGARS,

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.

## E. J. BALDWIN'S

Pure Grape

## BRANDIES AND WINES.

ATTENTION IS CALLED TO THE JUSTLY CELEBRATED PRODUCTS OF THE

Santa Anita Vineyard,

San Gabriel Valley, California.

## PURE OLD PORT WINE,

Vintages of 1875, 1876, and 1877.

Will be found very rich and choice. Warranted pure and of full body.

## PURE OLD ANGELICA,

Vintages of 1875 and 1876.

This is a Wine of Superior Quality, and such as has never been on the market in any country. This article SHOULD NOT be classed with the so-called Angelica Wines of this Coast, but is of a rich, rare flavor and full bodied, and NO CORDIAL can compare with it.

## PURE GRAPE BRANDY,

Manufacture of 1875 and 1876.

Cannot be excelled, having been but a few months before the Public, it is meeting with unparalleled favor, to the exclusion of all other brands.

## Special Gold Medals

AWARDED AT THE LAST CALIFORNIA STATE FAIR, AND ALSO AT THE SAN MATEO AND SANTA CLARA DISTRICT FAIR

ALL OF THE

## "BALDWIN" BRANDIES

Are Manufactured from the best selected grapes, grown upon soil peculiarly adapted to fine brandies, and is always retained in private stock until over five years of age, and none offered for sale at a less age. Guaranteed free from foreign spirits or adulterations of any kind, and the identity of the brand always preserved, which is a guarantee for fine quality, flavor, and purity.

Skilled Experts, Judges of brandies, of all nations, Doctors and Scientists, at once pronounce E. J. BALDWIN'S

PURE GRAPE BRANDY

The PUREST and BEST in the WORLD

One of Many Testimonials:

SAN FRANCISCO, May 23, 1883.  
E. J. Baldwin, Esq.—Dear Sir: I have great pleasure in assuring you that your Santa Anita Pure Grape Brandy, in my opinion, is of the highest quality, and is not excelled in flavor, taste and purity by any brandy produced in France and I should from a careful attention paid to the selection of the grapes and the method employed in returning the fruit to the equal of the same vintage, can be found anywhere. I took great pleasure in distributing the package I sent me to many friends, and all seemed as delighted as surprised that our State could boast of such a production.  
I am, very truly, yours,  
(Signed) A. J. BOWLE, M. P.

For the Car Cask Brandy the "BALDWIN" BRANDY cannot be equaled for medicinal purposes. It is for the friend of any other and is of a most agreeable and healthy nature, and no humbler or bad effects are ever experienced by its use. This celebrated brandy is made in a new patent distillery, manufactured especially for Mr. Baldwin by a first-class chemist, which renders it impure, and ages and matures it in a truly wonderful way, in a short time.

For sale by all leading Druggists, Liquor Merchants and first-class Grocers.

For Eastern and Foreign Markets, by direct letters to

E. J. BALDWIN 37 Ellis Street,

The Baldwin Hotel

SAN FRANCISCO.



# ELEVEN YEARS IN CALIFORNIA RAISIN MAKING.

Some time ago Mr. G. G. Briggs, of Yolo county, wrote to the *Rural New Yorker*, giving his experience in raisin making up to that time. As it is an interesting history we reproduce it for the benefit of our large list of readers who are or may hereafter engage in this industry:

In 1868 I bought a vineyard of 40 acres. The vines were all of the California grape variety.

In the spring of 1869 I grafted them to Tokay and Muscat of Alexandria—sometimes called Muscatel or Gordo Blanco.

In 1872 I had more grapes than I could sell fresh in the market, and made a few raisins.

In 1873 I shipped most of the grapes East, and got nothing for them; but had to pay \$1,000 freight, and lost all my labor, boxes and grapes.

In 1874 I picked them for raisins. The 27th day of September the sun became dim and would hardly cast a shadow till the 25th of October, when it began to rain heavily and continued raining until all my raisins that were not under cover had become completely rotten. When the rain commenced I had taken up about 20,050 pounds of raisins, and those which were spoiled by rain needed about two days of bright sunshine. I lost 160,000 pounds of raisins in the rain.

In 1875 I made about 160,000 pounds of raisins and planted 180 acres of vines.

In 1876 I made 150,000 pounds of raisins and planted 140 acres of vines.

In 1877 I made 300,000 pounds of raisins and planted 80 acres of vines.

In 1878 I made 400,000 pounds of raisins and planted 23 acres of vines.

In 1879 I made 640,000 pounds of raisins and planted 15 acres of vines.

In 1880 I made 800,000 pounds of raisins and planted 600 acres of vines.

In 1881 I made 1,000,000 pounds of raisins and intended to plant 75 acres of vines.

I shall then have over 1,000 acres in vines.

Our raisins were better last season than ever before. Two-fifths of them were first class.

I expect to make 150 boxes to the acre when my vines become full bearers, which will be in about four years.

A box of California raisins holds 20 pounds, full weight. We have put them up in whole, half, quarter and eighth boxes. J. K. Armsby & Co., of Chicago, have handled them all for the past four years. Three years ago they sold them on commission, and they netted me two and a half cents a pound. Two years ago they paid me \$1 10 a box. One year ago they paid me \$1 35 a box. Last year they paid me \$1 75 a box for first class and \$1 40 for second class.

My entire crop of green fruit, dried fruit, almonds and raisins sold for about \$100,000 last season, and my expenses have just about balanced it. I am satisfied that raisin making will pay in California if it is economically managed. Our grapes are ready to begin picking about August 23th. We have trays to put them on when we pick them. The tray is composed of 4 boards, 7 inches wide, 36 inches long and a half an inch thick, cleated together by nailing with clout nails a strip 3 inches wide, 28 inches long and a quarter of an inch thick across the ends of the four seven-inch boards, making the tray 28x36 inches. We place a tray to a vine and pick the grapes and place them on it, and then elevate the north end of the tray a little so as to get the full heat of the sun. Some vines have two trays of grapes on them and others even more, but the average is about one tray to a full-bearing vine. A tray holds about 25 pounds of grapes. We pick a first and second crop of grapes. There is a difference of about three weeks in the time of the ripening of the two crops. Grapes picked the 25th of August will cure in about 15 days. Those picked the first of October will require from 30 to 50 days, and some years we were obliged to use fire heat to dry them, or to finish drying them.

When the grapes are half-dried, we turn them over by placing an empty tray on them and turning them over, leaving them on the tray; then we take away the tray they were on, place it on another and turn it. Two good men will turn from 3,000 to 4,000 trays a day. When the raisins are made, we put them into sweat boxes, which hold about 100

pounds. They are 28x36x7 inches. The raisins are ready to pack four days after placing in sweat-boxes. Our packers average about seven boxes a day, four layers of live pounds in each box.

Our vineyards are well situated for railroad accommodations. Our packing houses are close to switches, which the railroad company has put in for our convenience. We can load a car with raisins in 30 minutes. We sell all our raisins f. o. b. (free on board). We prune our vines to from 10 to 20 buds, and they are no more than 10 inches from the ground. We find the finest bunches on or near the ground.

## REDWOOD LUMBER.

The *Post-Intelligencer*, of Seattle, W. T., has some severe strictures on Prof. Sargent's article, recently published in the *North American Review*. An extract from the article reads as follows:

"The belt of redwood forests along the California coast has always suffered severely at the hands of the lumbermen, and many of its finest and most accessible trees have already been removed. A large amount of this valuable lumber is still standing—less, however, than has generally been supposed; and at the present rate of consumption, the commercial importance of this forest will have disappeared in a few years more."

of practical lumbermen, who have traveled through the redwood region, a poor guess would be of more value than the figures issued by the Government.—*Northwestern Lumberman*.

## REAL ESTATE IN SOUTHERN CALIFORNIA.

A traveling correspondent of the *Bulletin*, of this city, furnishes that paper with the following notes:

The Pomona Land and Water Company offers tracts of 40 acres to settlers, at from \$75 to \$125 per acre. The location is midway between Riverside and Los Angeles. The village of Pomona contains 400 people, with public school, express and telegraph offices, churches, and railroad depot.

Etiwanda is the name of a colony that has made a fair start. Over 1,400 acres are said to have been sold in small allotments, within a year, at a range of \$100 to \$150 per acre. Concrete pipe, for irrigation, has been laid about seventeen miles in length. The electric light system is reported to have been successfully introduced. A \$6,000 hotel is just finished.

The Iowa tract is claimed to have good facilities for raisin culture. It is located near the famous Cucamonga vineyard.

The San Jacinto Ranch is being subdivided to suit stock-raising, general farming, or fruit-grow-

## SANTA ANA VALLEY AND ITS ADVANTAGES.

The following, which we take from the *Santa Ana Herald*, contains much information about a valuable section of the State:

The Santa Ana valley is one of the largest and most productive districts in the State of California. It is about fifteen miles long and twenty broad, extending from the foothills to the ocean. At least three-fourths of this area is susceptible of cultivation, and the day is not distant (if we may judge by what has been accomplished), when every acre of this district will be brought under cultivation, and made to yield its proportion to swell the grand total of our horticultural and agricultural wealth. Already we have more than 11,000 acres of irrigable lands under cultivation; at least 6,000 acres embracing orchards and vineyards, and every year sees this area is extended.

We exported last year 20,000 boxes of choice oranges and 16,000 boxes of first-class raisins. This year we expect to market 30,000 boxes of oranges and 20,000 boxes of raisins. Wool, grain, hops, potatoes and miscellaneous agricultural products and live stock were exported from our valley last year, the weight of all exports, both by rail and sea, footing up the gratifying total of 21,600,000 pounds. In addition to the successful cultivation of the orange, lemon, lime, banana, prune, the soft-shelled walnut and almond, we can and do raise the largest and finest apples, pears, plums, figs, etc. All varieties of grapes find a congenial home in our valley, it having been conclusively demonstrated that the soil retains the moisture longer, and the fruit is much larger and better flavored than most other sections. Every year new vineyards are planted, and there is great profit in grape growing at last year's prices, \$20 per ton, a vineyard four years old yielding at least eight tons to the acre. The raisin industry is destined to be of vast importance in our valley, our climate being so peculiarly adapted to the successful manufacture of raisins which will, in the course of time, drive the foreign article from the markets of the country. The demand for the product is steady at good figures, and last year several carloads were shipped direct to Eastern markets from this county. So much, briefly, for our productions.

As to the climate of our valley it can not be excelled, even by the famed regions of France, Spain or Italy. The average temperature for each month, during the past year, is as follows: January, 59 degs.; February, 59½ degs.; March, 59½ degs.; April, 67 degs.; May, 67½ degs.; June, 71 degs.; July, 73 degs.; August, 75½ degs.; September, 73½ degs.; October, 66½ degs.; November, 63 degs.; December, 56 degs. Average for the year, 65½ degs. In January we had 28 pleasant days; February, 26; March, 30; April, 28; May, 26; June, 28; July, 29; August, 29; September, 28; October, 30; November, 30; December, 28.

There is scarcely a day in the year that a gentle coast breeze does not blow, the valley bordering on the ocean, the town of Santa Ana being only nine miles from Newport, the landing-place for our steamer from San Francisco. Improved lands, according to location and improvements, are held at from \$300 to \$1,000 per acre; unimproved lands, suitable for orchards and vineyards, (depending also on location and facilities for irrigation), from \$50 to \$150 per acre. These figures are not high, by any means, as compared with lands devoted to the same purposes in France, Spain, and Italy, or even in Florida, where \$3,000 an acre has been frequently paid for lands covered with orange orchards, and that, too, in a country which has poor soil, a climate not comparable to ours, and subject to some of those awful visitations of nature, of which we made mention elsewhere. To sum up, the above are some of the advantages we offer home seekers in the Santa Ana valley.

## MANUFACTURES.

The census of 1880 shows that the number of manufacturing establishments in the State, (gas excepted), was 5,885; the amount of capital invested in them, \$71,213,783; the average number of hands employed, including children and youths, 13,633; total amount paid in wages during the year, \$21,065,000; value of the materials used, \$72,607,702; value of products, \$116,218,973. This is no bad exhibit.



THE LUMBER INDUSTRY—HAULING REDWOOD FROM THE FOREST.

This, the Washington Territory paper calls "the very error of the moon, so to speak." It says:

"In Humboldt county, California, the whole area of the redwood forest has been mapped and plotted. There is something like 600,000 acres of that timber in that county alone. Disinterested experts estimate 100,000 feet of lumber as an average, if not a small yield. At eighteen dollars per 1,000 feet, the redwood of Humboldt county alone would just about pay the present national debt. There are immense untouched bodies of redwood in Del Norte county—to the north of Humboldt—in Mendocino, Sonoma, Marin, and Santa Cruz counties to the south. We do not know what the writer means for a few years. The oldest child begotten by any of the babes born to-day will not live to see the supply of redwood exhausted on this coast. A statement so wild as the above leaves little room for the reception of what else the writer has to say as trustworthy material upon which to base an opinion as to the extent and value of our forest growths. We will not follow him further in this direction. He evidently is not at home in the woods."

An interesting feature of these comments is the estimate of the amount of redwood standing in Humboldt county. It is placed at 50,000,000 feet, while the forestry bulletin of California, under the direction of Prof. Sargent, puts it at 25,825,000,000 for the entire State. According to the opinions of

land is offered at from five to thirty-five dollars per acre.

In the El Cajon valley there is a large area of land being staked off that will be offered at public auction within a week or two.

Ontario, though one of the latest settlements projected, already boasts of a good-sized, readable, weekly newspaper. A horticultural college and a cable steel railroad are among the promised features of the future.

The American colony offers land down to \$50 per acre, and will sell in tracts as small as five acres.

A sale of a tract of 40 acres near Colton is reported at \$6,000.

The Colton cannery is being enlarged. More fruit is expected to be handled the coming summer by this concern than ever before.

## HOWELL MOUNTAIN VINEYARD.

Charles Krug, says the *St. Helena Times*, is preparing to put out 25 acres on his Howell mountain vineyard, and ground is now being plowed for that purpose. The vines will be put out in a few weeks. At his Ingram ranch, towards Calistoga, several acres will be put out, various foreign varieties to be used. A ditch about 1,000 feet long has been constructed on this place. It is about eight feet wide and four feet deep, and carries off the surplus water, which has hitherto been a detriment to the place. With improved drainage, the vines will undoubtedly thrive well.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR,

PUBLICATION OFFICE:

No. 340 Sansome St., Halleck Building.

ISSUED MONTHLY

Terms.....\$2 per Annum.

SAN FRANCISCO.....MARCH, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

**First Page.**—San Diego County.  
**Second Page.**—San Diego County, Continued.—Oatrich Farming.—Diversified Farming.—The Heart of Sacramento County.—A New Fruit and Shade Tree.—The Lincoln Pottery.—Cost of Hop Culture.—Storage Reservoirs.  
**Third Page.**—Will the Fruit Market be Overdone?—Antelope Valley, Tehama County.—A Rich Agricultural Section.  
**Fourth Page.**—Value of Farm Lands in San Luis Obispo.—Subdivision of Large Ranches.—Stockton and the San Joaquin.—Grapes and Raisins.—California's Future.—Copper in Calaveras County.  
**Fifth Page.**—A New Current.—Fruits for Canning.—Where to Find Homes.  
**Sixth Page.**—Big Buena Vista.—Arrival of Government Carp.—The State University.—Fruit Lauds.—Farming Lands in Calaveras County.  
**Seventh Page.**—Eleven Years in California Raisin Making.—Redwood Lumber.—Real Estate in Southern California.—Santa Ana Valley and its Advantages.  
**Eighth Page.**—Our Manufacturing Interests.—Increase in Viticulture.—A New Mining Scheme.—The Revival of Industry in the Mountain Counties.—St. Helena Wines.—Thirty Thousand Visitors.  
**Ninth Page.**—What Shall we do with Our Boys?—Our Shipping Interests.—The Calico Mines.—Angora Goats.—Summer in the Country.  
**Tenth Page.**—Best Grapes for Wine.—A Good Chance to Invest.—Greenville Mining District, Plumas County.—Bright Prospects Ahead for Agriculture.—Mining Matters.  
**Eleventh Page.**—San Gabriel Mission.—Wine and Temperance.—Do Something.—Vine Grailing.  
**Twelfth Page.**—The Foothill Country.—Alvarado, Alameda County.—Culture of Hops.—Useful Minerals.  
**Thirteenth Page.**—A Wooden Mill.—This Great and Glorious Country.—An English View of California.—Farmers' Profile.—Small Farms and Happy Homes.  
**Fourteenth Page.**—The Food Supply of Europe.—Viticulture in Los Angeles County.—Humboldt Railroad.—Another Petrified Forest.  
**Sixteenth Page.**—California and its Many Advantages.—The "West Side."—Governor Stanford's Visitation.—The Raisin Grape.—The Northwest.—Mr. Cooper's Olive Interest.

## PETALUMA LAND AND REAL ESTATE AGENCY.

The firm of Messrs. Geo. C. Young & Co., in Petaluma, does a general real estate business. They have facilities for furnishing to immigrants desirable small tracts of land, suitable for all kinds of fruits, vines, etc. They will sell such lands as cheap as they can be purchased from the owners themselves. Title in all cases perfect, and terms made easy. On application they will furnish printed lists with descriptions. They have the finest vegetable and grain lands to be found in the State.

## AN IMMENSE IRRIGATING CANAL.

Great attention is paid to irrigating lands in Fresno county. Numerous ditches take the waters of King's river for miles, over the dry plains. It is stated that the latest canal projected is to be 27 miles long, and is to carry a flow equal to 1,500 cubic feet per second. The total cost of the canal will be about \$90,000. It will enable very many land-owners to irrigate their otherwise comparatively valueless land, and will, by enhancing the value of farms, add to the taxable valuation of the county some \$23,000,000.

## STOCK-RAISING.

The farmers, all over California, are finding out that this is a paying business; and several are gradually leaving farming for stock-raising. The hills around many beautiful valleys of our agricultural districts are well adapted for the purpose.

## SILVER IN EL DORADO.

We learn that there has been a discovery of silver-bearing rock in the above-named county. The local papers express the belief that more thorough prospecting will develop ledges that can be profitably worked.

## OUR MANUFACTURING INTERESTS.

The growth of our manufacturing industries, notwithstanding their great importance, appears to attract less attention than almost any of our leading interests. It is highly probable that not more than a few, among our own citizens, are aware of the degree of development to which they have already attained, while even among those at a distance, who take an interest in the affairs of California, our claims as a manufacturing seat are hardly recognized. A tabular statement was recently published showing that the manufacturing establishments in the State employ over thirty thousand persons; and that, during the last year, the united value of their products amounted to over \$100,000,000. When we compare this statement of things with that which existed a few years ago, the extraordinary advance we have made will be, at once, apparent. It is not exaggerating to say, that within the brief period of five years, the number of manufacturing establishments has more than doubled, the number of laborers employed quadrupled, and the value of the products manufactured shows a proportionate increase. Such results are indicative of the achievements we may reasonably look for in the future, with our increasing wealth. With a soil and climate suited to the production of the raw material for nearly all the important staple industries, and a geographical position which naturally commands a trading field of colossal proportions, the prospects of our State's future greatness, as a manufacturing center, are amply assured.

To those who still persist in looking on California as merely a mining camp, the fact must appear somewhat astonishing that the value of her manufactured products, in a single year, is nearly equal to the bullion yield of the entire territory west of the Rocky Mountains. We can not refrain, however, from paying the mining interest, in this connection, a passing tribute. It is an industry of which we are all proud. Its products have been the chief means of stimulating and sustaining our other great productive resources. Its mission in this respect has not, we trust, reached its climax, and it is certain from the experience of the past, that in proportion as our mineral productions increase our agricultural and manufacturing interests will extend and flourish; till they reach a point at which their further progress will be independent of local conditions.

## INCREASE IN VITICULTURE.

Governor Perkins, in his message to the Legislature, estimates the present value of 60,000 acres in new vineyards at \$15,000,000. That is at the average rate of \$250 per acre. It is not too high a valuation. These new vineyards are almost exclusively planted in the best foreign varieties of grapes, and, when seven years old, will yield for wine, at a moderate price, not less than \$60 an acre. The total acreage in vineyard on June 30th, 1881, was 75,141 acres; on June 30th, 1882, it had risen to 101,031 acres, an increase of 25,890 acres, or over 34 per cent. in one year. No other country connected with the cultivation of the soil shows so large an increase.

Only about a decade ago, the vine acreage of California was insignificant, and viticulture was confined almost exclusively to the counties of Los Angeles, Sonoma, Napa, Sacramento and San Joaquin. Now, we have, at least, 150,100 acres in vineyards, most of which has been planted in the last year. Viticulture is the staple industry in Los Angeles, Sonoma, Napa, Sacramento, San Bernardino, Santa Barbara, El Dorado, Calaveras, Tuolumne, Fresno, and is rapidly increasing in Contra Costa, Santa Cruz, Monterey, Stanislaus, Mariposa, Merced, Solano, Yolo, Tehama, Lake, Mendocino and Butte. It is confidently believed that the net returns from the vines already planted, four years hence, will be nearly \$8,000,000.

## A NEW MINING SCHEME.

It is stated that a number of wealthy New Yorkers have organized a company, with a capital of \$20,000,000, to tunnel under the mountains near Oroville, Butte county, and for gravel mining. The head offices of the company are at Buffalo, New York. Ex-Congressman Ray V. Pierce is president of the company, James De Graff is Treasurer, and N. A. Harris, of Oroville, is General Manager and Superintendent. There is believed to be more gold under the Sierra Nevada mountains than was ever taken out of them.

## THE REVIVAL OF INDUSTRY IN THE MOUNTAIN COUNTIES.

Mining seems to have taken a new start throughout the entire mineral range of the State. Capitalists are more and more giving their attention to this industry. In every mining district there seems to be a prevalent feeling of renewed confidence among the people, and a strong disposition manifested to extend mining operations. New quartz lodes, of promising richness, have recently been discovered in various localities in Calaveras, Amador, Mariposa and other counties. The old blue gravel tunnel mines of Sierra are now yielding largely. The mines in Plumas, Shasta, Siskiyou and other old mining sections are reported to be paying very large dividends to their enterprising owners. In San Bernardino and other sections of Southern California new developments are being constantly made in the recently discovered mining districts. The mining interests of the State are as yet only in their infancy.

The revival of industry in the mountain counties is not, by any means, confined to mining alone. The farming and fruit growing interests present equally strong evidences of renewed life. Settlers are obtaining titles to the land, and, in the course of a few years, a fixed population, with all the comforts of permanent homes gathered around them, will take the places vacated by wandering miners. All through the gold sections of the State, in the Sierras, there are innumerable basins, or small valleys, of rich agricultural land, which can now be taken up by anyone who may wish to settle down and found a home. Our State is now being penetrated by railroads in all directions, which are opening up new and productive sections of country. Towns, and even cities, have sprung up within the last few years very rapidly, in some sections. Farming lands and town property are rapidly appreciating all along the lines of these roads. And right here we wish to state, particularly, that the railroad has exerted a most powerful influence in raising California to a position which she now occupies, as a prosperous commercial State. If there is anything to which the people of California are indebted to more than another, for the prosperity, general activity, and progress she now enjoys, it is her railroad facilities.

## ST. HELENA WINES.

The following wine notes are taken from the St. Helena Star, of recent date:

The value of some of the choice kinds of rare grapes may be seen in the fact that Mr. Scheffler sold from his Edge Hill cellars, in 1882, two thousand gallons of a blend of Mourvedre and Carignan, for 65 a gallon. This was '81 wine. The same wine had been sold, when six months' old, for 55 cents, and now, since New Years, when it is fifteen months' old, is held at 75 cents, and there is not enough to supply the demand at that. It is important to add that the purchasers are a firm of the heaviest wine dealers in Los Angeles county. There is a moral in this somewhere, for our grape planters, if they can only find it.

It is a gratifying indication of the popularity of St. Helena wines that a prominent resident of Los Angeles has just sent to Mr. Scheffler for 150 gallons for his own use. A Fresno man has also lately sent to the same cellar for a supply.

G. O. Fountain has sold to Lachman & Jacobi, San Francisco, his crop of 21,000 gallons of wine, and is now shipping it.

Louis Sander is hauling his wine to Beringer Brothers, to whom he sold his crop of 20,000 gallons.

## EMPLOYMENT FOR MILLIONS.

California, in the culture of grapes, sugar, tobacco, raisins, olives, fruit, flax, hops, in manufacturing, in mines, in commerce, in forests, in ship-building, can furnish employment for 10,000,000 of people, and can maintain them in comfort, if they will labor. There is, says a writer, who is well informed on the subject, a twenty or forty-acre piece of land for every industrious workman that has enterprise to come from the Eastern States or Europe to occupy it, and support, in comfort and independence, for everyone that is willing to toil.

Californians should feel a pride in a publication which is doing so much for the State as this journal is, and send it to their friends.

## THIRTY THOUSAND VISITORS.

A writer in the Oakland Tribune, in speaking of the 30,000 people soon to visit this State, in one body, says:

From all parts of the United States there is now sufficiently definite information to warrant the assertion that at least 15,000 Knights and half as many ladies will visit California for the triennial. The strain upon railroad accommodations will be so great that the transit must begin by the first of June and continue till August 12th, when the Grand Encampment meets. Every available sleeping car on the continent has already been engaged. Some of the Pullman palace cars have been secured, to be side-tracked and used by their occupants during their stay. Fifty dollars a day each is reported as the price. Box cars are to be fitted up to answer, when all the more comfortable ones are exhausted. The next great effort will be to find sleeping accommodations in San Francisco, Oakland, and other places within reach of the metropolis. A generous hospitality will be demanded of every household having a spare bed and an extra place at his board. Thousands of people who want to see California before they die, will take advantage of the \$75 passage from the Missouri river to San Francisco. But they must be Knights Templar; so the Commanderies of the East are working faithfully to qualify Royal Arch-masons to participate in the great transit. In a little time the Committee will have the exact figures, but enough is now known to warrant the assertion that 25,000 or 30,000 people will be here to see us and test our hospitality. And such people, too; the very select of the worthy, if not the wealthy, of the land—people it will be an honor and a pleasure to meet and to know and entertain. For such we have no doubt of a generous reception by all our citizens. The result of such a visit will be the accession of hundreds and thousands of these sight-seers to the permanent population of the coast. Our advantages must be known to be appreciated. The visit will make them known.

## CENSUS STATISTICS.

California is now the foremost sheep-breeding State in the Union. The census statistics for 1880 show a grand total of 42,381,289 sheep in all the States and Territories, California's share being 4,152,349, or nearly one-tenth. The next highest State is Ohio, with 3,902,000. New Mexico had 2,088,832, and Michigan 2,149,389. The Pacific States and Territories stand credited as follows: California, 4,152,349; Oregon, 1,083,162; Washington, 221,883; Nevada, 133,695; Idaho, 27,326; Colorado, 74,422; Arizona, 76,552; total, 6,512,380.

## SAN FERNANDO OIL DISTRICT.

O. N. Felton leases the Los Angeles Express the oil prospects in the above district, located in Los Angeles county, are very encouraging. His company expects to double the quantity of oil now taken, in a few months. The present yield of the wells is 400 barrels per day. It is estimated that it would require at least a yield of 1,500 barrels to supply the oil consumption of the Pacific Coast, and Mr. Felton's company alone expects to reach this amount in the course of a few years.

## RESERVOIRS FOR IRRIGATION.

We learn, from the Los Angeles papers, that some large capitalists have under consideration the matter of constructing vast reservoirs, on the upper waters of the streams used for irrigation in that county, by damming canyons through which they find their way to the plains. If this is done, it is believed that the water can be so saved and utilized, that there will be enough to irrigate all the arable land in that county.

## CHANCES FOR EMPLOYMENT.

It is stated that in our immense timber forests thousands of lumbermen, charcoal-burners, wood-choppers, etc., can find employment. We honestly believe that California to-day affords more advantages to all classes of people, the rich and the poor, than any other State in the Union. A man, with a small sum of money, can live here cheaper and better, with much less work, when he cultivates the soil, than in any other place that we know of.

Subscribes for the RESOURCES OF CALIFORNIA.



# WHAT SHALL WE DO WITH OUR BOYS?

[Written for THE RESOURCES OF CALIFORNIA, by James C. Kemp.]

This question has been asked over and over again, for the past ten years, from one end of the State to the other.

Article upon article has been written upon the subject, but all to no purpose, and in the meantime the aggregate of boys has augmented at a rapid rate, while enforced idleness has steadily swollen the ranks that are continually marching on, in the direction of the County Jail, Industrial School, House of Correction, and each of the State prisons.

The fathers and mothers of California have been favored by the Great Creator, in a manner that has no precedent in history.

Never before did any people have such grand opportunities, or be the possessors of so magnificent a heritage.

It has become a settled, foregone conclusion, that this State is to be one of the most populous and opulent that has ever been known; while the city of San Francisco will eventually become the great monetary and commercial centre of the world; with the civilizations of America and Europe at her back, and that of Australia and the two nations of Japan and China on her front, from which will radiate, in every direction, the most valuable productions of intellectual, agricultural and mechanical labor.

There is room enough here for every boy to have a farm, adapted to the culture of the great specialties, silk culture, etc., which can not be excelled in any other region, and of which California could have almost an absolute monopoly.

Every intelligent being born into this world has imperative obligations to perform. We were not placed here to consult our own particular tastes and desires, but on the contrary, to perform stern duties, whatever they may be, each in his own day and generation.

Our ancestors thoroughly understood this, when for the sake of a mighty principle, they gave up every comfort of country, home and family, crossed the trackless ocean and, amid snow and ice, landed on Plymouth Rock in the dead of winter, with but one friend in all the universe, and nought but the leaden sky above their heads.

The descendants of that immortal band understood it equally as well, when an hundred and forty-six years later they faced the best troops of Europe, and freely poured out the most precious blood that ever flowed in human veins, that their descendants might enjoy the great principles of civil liberty and live under the best form of human government ever devised by the mind of man.

Since then, an hundred years have come and gone, and we of California are surrounded by every comfort and luxury that the most fastidious could desire. The fairest land God ever made. An atmosphere as pure and bright as the gems of Golconda. A climate, the most superb that ever was, and a soil, the like of which was never known.

Besides all these priceless blessings, we have a complete monopoly, as I before stated, of certain products, which the rest of the world can not do without, the demand in fact being so great that with all our resources stretched to the utmost tension, we shall still be unable to wholly supply it.

And yet, under such circumstances as these, the fathers and mothers of California helplessly sit down, and, in tones of the most abject despondency, cry out, What shall we do with our boys?

Is not this unparliamentary, base ingratitude? And are we not proving ourselves fearfully recreant to the sacred trust bequeathed, and noble example set us by the Pilgrim Fathers, mothers, and heroes of the Revolution, whose descendants we claim to be?

I would ask the parents of the boys in California, what the best soil in all the world is for if not to be cultivated. What too does 350 days of each year, that a man can work in his shirt sleeves, and 200 of successive sun, shine mean, if not to work in the open air, and cultivate the soil.

Has not the Creator plainly said to the people of this State, I have given you for a heritage the Eden of the world. As in the commencement, I placed your first parents in Paradise, so now have I given you California, that you and yours might become the most prosperous people that ever existed.

How have the parents of this State replied to this?

They have neglected to till the magnificent soil, and are, in most cases, so partial to city life, that they are unwilling to make the imperative sacrifice, for the sake of their boys, thus permitting them to grow up in idleness, while the sensible immigrant from other climes comes here, acquires the land, and with it all the golden opportunities and heretofore unheard-of advantages.

This insane devotion to city life, and blind worship of dress and style, is the principal curse of modern civilization; and, on account of it, our boys and girls are yearly becoming more and more useless, and, in another generation, their ruin will be complete.

I know this is strong language, but where, I would ask, is the man or woman who does not feel, in their heart of hearts, that it is strict, honest truth.

Have we not degenerated fearfully since 1620, and is it not time to cut loose from this terrible bondage, once more assert our manhood, and prove true to our God, our ancestors, our children, and ourselves?

There is no necessity for the parents of California to ask the question "what shall we do with our boys?" People East might do it, but we—of this State—"never." Teach your son that a good trade is a thing of the past, all trades being divided and sub-divided, much of the work being done by machinery, and even at best is simply the ability to do a thing, provided some one else will hire him to do it, placing him always in the position of an applicant, when it should be his aim to become a genuine king.

That everyone of the learned professions are crowded to suffocation, that a clerkship is not only the worst ship a man ever embarked on, but, as business is now conducted, actually one of the hardest positions in the community. Teach him further that, in twenty years, this State will be divided into innumerable orchards and vineyards, each of which will be an earthly Paradise. That the owners of them will be the most independent class that ever lived, and finally, that the one sole aim and purpose of a California boy should be to become a viticulturist and fruit-raiser.

I consider it the sacred duty of every parent in this State, who has a boy, to make any and every sacrifice, in order that he should learn and follow those pursuits, just as if there was actually nothing else whatever for him to do.

My reason for this is that there can possibly be no other business so good for him, he, under these most fortunate circumstances, becoming a king and monopolist by Divine Right.

In order to carry out this idea, the parents of the boy, or boys, must be willing, if necessary, to give up city life, and go live upon a piece of land, and put up with any and every sort of inconvenience, until their trees and vines bare, become old enough to give them a support. I consider that no parent has a right to consult his or her taste on the matter, and say they can not leave these comforts, and go and isolate themselves upon a farm.

Duty to their children demands it, and if not equal to the occasion, they are unworthy the names of Americans. This is right where the shoe pinches, and is the one great obstacle above all others.

"Why, I never heard of such a thing," cries one lady, "I had sooner live on a single meal a day in the city than the fat of the land on a farm. No sir, I would not before I would do it." And so the boys must hang around, work in pickle factories, be kicked about from pillar to post, and finally grow up miserable wretched beings; and reader, just as sure as I am writing these lines, I have given you the true cause of much of the enforced idleness among the youths of this and other Californian cities. This is what's the matter, the fault lying wholly with the parents themselves, the words fashion and style being at the bottom of it. God has given us the incomparable soil, unapproachable climate, magnificent advantages, and has finally crowned all with the exclusive monopoly of the products; but because He has not added the sidewalks of Kearny and Market streets, and general pleasures of city life, all are spurned; and the sensible immigrant from other climes continues to come, and will continue, until not one solitary acre of this fair heritage shall remain unoccupied.

When that day arrives, the question, "what shall we do with our boys?" will be answered

emphatically, they and their children having become the servants and drudges of the owners of the soil.

Style and fashion are very proper for those who have ample means to live up to their requirements.

For a rich woman to pay forty dollars for a bonnet is just what is needed to help the milliner along; but, to the mind of the writer, for a family of small means, who live off the wages of the father, a good cow would be a wiser and better investment; and the five or six hundred dollars that has been saved up to buy the wife a sealskin sacque, as a Christmas present, would purchase and plant ten acres of good fruit land, and start at least one boy on the highroad to princely wealth.

The writer very respectfully submits the foregoing to the perusal and consideration of the readers of THE RESOURCES, fully believing that it is one solution, at all events, of the great question, "What Shall we do with Our Boys?"

## OUR SHIPPING INTERESTS.

There is one pleasing fact connected with the shipping interests of Humboldt county, and that is that a large portion of the vessels constructed at the yards on our bay are owned by enterprising men who have their homes there. Men who, with limited capital at their command, are giving considerable thought to this matter, and are manifesting a willingness to invest in that direction. At the present time, no less than some 25 vessels, large and small, are employed in carrying away the products of this county. This number of vessels represents an amount of capital close on to \$1,000,000, and may, perhaps, exceed that sum. A large portion of this money belongs to non-residents, many of whom reside in San Francisco. The resources of the county are extensive and varied, and each year adds largely to the amount of products to be shipped away, not only to markets in our own State, but to those in foreign lands. Capital invested in providing the means by which these products shall be speedily conveyed to market cannot fail to bring to its owner, or owners, good interest on the amounts invested. This being the case, why should not our own citizens own and control most of the vessels engaged in carrying freight from Humboldt county? They should own these vessels, and in small shares, being well distributed among the people. This would result in having the property taxed here, adding greatly to the prosperity and welfare of the county. San Francisco now receives quite a handsome sum from taxes on the vessels engaged in the carrying trade of this county, all of which can and will be saved to our own county when its citizens build and own these vessels. Since Eureka has become a port of entry, it is to be hoped the enrollment list will swell up and compare favorably with Eastern towns of like importance.—Humboldt Telephone.

## THE CALICO MINES.

In its last issue, the *Print*, published in the town of Calico, San Bernardino county, says: The outlook of our mines, at present, is very bright. All the principal mines are being worked, and a good many claims are being prospected, with good results. As work progresses, the forces of men employed in the mines are increased, and very few idlers can be seen on the streets. It is the intention of some of the companies, if the amount of ore now taken out yields as well as they expect, to build mills for their own use, and we have every reason to expect that there will be at least half a dozen mills in operation in this vicinity this summer. The richness of the ore in some of the mines is wonderful. Large quantities of ore that will average hundreds of dollars to the ton are ready for the Oriental mill, when it begins operations. Sherman's mill is running day and night, on an amount of bullion quite satisfactory to its owners. A number of boarding and lodging-houses have been put up at the principal mines, good roads have been opened to most of them, a great many other improvements have been made, and the mines are being put in good working order, with the expectation of doing a large amount of work this summer.

## QUARTZ MINING.

Quartz mining, in Nevada, Butte, Sierra, and other mountain counties, is active, and the prospects are generally favorable for a good yield in the future.

## ANGORA GOATS.

H. T. Hatch, whose ranch is north of Willets, is the owner of quite a large band of graded Angora goats, ranging in grade from half to fifteen-sixteenths, and is more than pleased with his venture. More goats can be kept on the same range than sheep, and the expense of taking care of them is less, while shearing and marketing come but once a year. The demand for mohair is constantly increasing in this country, promising to far exceed the supply of the world in a very few years, and the price paid is always sufficient to pay a good, round sum on the investment. In this connection, it will not be amiss to present the following extract, taken from the *Breeders' Gazette*, relative to the growing demand for mohair:

"During a recent walk through the largest woolen mill in the neighborhood of Philadelphia, the writer was surprised to find a large pile of bales filled with mohair. Upon inquiry, the fact was elicited that already considerable machinery is running on fabrics composed of mohair, the majority of which is imported. This fact is especially interesting to those who have heard of the absence of a market for mohair quoted as an argument against the profitable culture of Angora goats in the United States. This hair, though going into several other fabrics, is principally employed in the manufacture of plushes, for covering the seats of railroad cars—an industry just now attempted in this country. The proprietor of the mill above referred to, admitted the superiority of the American mohair, and emphasized his conclusions by comparing samples of foreign and domestic product. With a fair market for their fleeces—as reliable as that of wool—within ready reach, there seems no reason why the culture of Angora goats should not take its place beside that of the hitherto more popular farm animals. In fact, in many localities, goats can be handled without at all interfering with other stock—as they prefer those hilly and arid localities, inaccessible to most other animals. The time for sneering at efforts in the direction of introducing the Angora goat in the United States seems to have gone by forever."—*Mendocino Dispatch*.

## SUMMER IN THE COUNTRY.

The South Pacific Coast Railroad Company, (Narrow Gauge), has issued a very neat descriptive "List of Hotels, Boarding-Houses, and Excursion Grounds, with names and Post Office addresses of Proprietors," located along the line of its road, including San Jose and Santa Cruz. These lists are for free distribution, and are call the attention of our readers, and of committees, to the superior advantages of this route, for a summer holiday. The Santa Cruz mountains are unexcelled for campers and health-seekers. The Big Tree Grove and Santa Cruz are glorious places for excursionists. Schutzen Park, under the new management of Capt. Cantus, and Newark Park, by Julius Wildermuth, are perfect picnic grounds. These lists, with folders, descriptive of the route, time-tables, rates of fares, etc., can be obtained at all of the Company's offices, or at 222 Montgomery street, and at Passenger Station, foot of Market street, south side, San Francisco. All offices are connected by telegraph and express. For special excursion rates and contracts, apply to R. M. Garratt, General Freight and Ticket Agent, at the General Office.

## A HIGHLY-FAVORED COUNTRY.

The Santa Cruz *Sentinel* thus speaks of its country: "We have grand scenery, several rivers, a beautiful bay, the biggest ocean in the world, great forests, swelling vales, high mountains, hills purple with clustering grapes, fields golden with ripening grain, thickets full of whirling birds and bounding deer, roads running in every direction, a hundred places of interest, creeks alive with speckled beauties, an arm of the ocean inhabited by the monsters of the deep, and a city that Adam and Eve would enter, were it possible for them again to be driven from the garden of Eden."

## TIMBER LANDS.

The correspondent of the *Minersville Appal* says: There is a rash, among capitalists, to secure timber lands. From Menlocton to the Oregon line every newspaper is literally filled with "Timber Land Notices." It is a wonder that these valuable lands have not been taken before this late day. The sooner the Government land in the State, whether timber, farming or grazing, passes under private ownership, the better it will be for all concerned. They will be improved and begin to pay taxes for the support of the State.



## BEST GRAPES FOR WINE.

At the last meeting of the Santa Clara County Viticultural Society, the discussion on "the best varieties of grapes for wine" was opened by L. D. Combe, with the following paper, which will be read with interest by all vineyardists:

It is not my purpose to give here extended remarks upon the different desirable varieties of grapes, but only to point out those that have proved to be especially adapted to the soil and climate of portions of this valley that are known to produce a high class of wine. First, foremost among these, I would name the two that are almost exclusively used in the production of Burgundy, the Pinusard and the Petit Pinot. As far as tried, their yield has proved satisfactory, and the quality of the wine unsurpassed; second, for the production of the best Bordeaux wine, we have the Cabernet, which, as we know, forms the basis of the famous Medoc wine. It seems to have a preference for a soil rather moist. The Chateau Noir produces an excellent wine, different from the two first named. It grows well here, but, like many other valuable varieties, is rather a shy bearer. For the Bonissillon wine we have the Matro, which brings good crops in any soil, the Grenache, inclined to produce much wood, prefers, consequently, the light soil, the Charbonneau doing well almost anywhere. The two varieties last mentioned would make an excellent wine, if mixed in the vats. For white wine there are four distinct varieties, each one producing an entirely different type of wine. The Sanrigonne and Colombar, of the same family, give us the true Sauterne. The different varieties of Rieslings produce our imitation of Rhine wines. The Folle Blanche is essentially a brandy grape, but its wine may be used in blending with either white or red. The Chasselas, of which a number of varieties are raised, will give, when treated properly, a fair quality of wine. All these varieties are known to do remarkably well in this valley; the Riesling requiring long pruning, and the Chasselas doing much better when grafted on more vigorous stock. In conclusion, I would suggest that parties who wish to plant of the most varieties, and are unable to procure cuttings at present, should set out some of the thrifty growers, like the Mission, Rose de Perne, and Verdal, for stocks, and in two or three years grafts may be obtained, and thus much valuable time is gained in the establishment of valuable vineyards. As a proof that much may be done in one season, in the way of grafting, and almost wholly with unskilled labor, we will state that Mr. Briggs, of Davisville, once grafted 28,000 vines, in one season, at Wintersville, with very good success.—*San Jose Mercury*.

## A GOOD CHANCE TO INVEST.

We have often referred to the fact that it would pay some of our Hollister capitalists to erect a number of cheap but good dwelling-houses for rent, and we do so again in the hope that some of our moneyed men will take advantage of the opportunity, not only to make a profitable investment for himself, but to convey a substantial benefit to a large number of families who are now occupying inferior, uncomfortable and unhealthy houses, simply because they can not procure any others. For over two years there has been a dearth of dwelling-houses in this town; at the present time the demand greatly exceeds the supply, and where we find one dwelling for rent we find half a dozen families who want it, in order to get away from the miserable little coops in which they are compelled to live, on account of the scarcity of decent houses. There are many families here who are either too poor, or for some other reason, do not desire to buy property and build dwellings of their own, but who are willing and able to pay a good rental for comfortable, well-built houses. Hence we say that the man who puts up in this town a small number of neat, well-appointed tenements, will have no trouble to find tenants, and will receive a handsome return for his investment.—*San Benito Advance*.

## GREENVILLE MINING DISTRICT, PLUMAS COUNTY.

The Greenville Bulletin, of Jun, 10th, thus speaks of some of the mines in that district: On Monday evening a clean-up was made at the Crescent mine after a four days' run with four stamps, and the result was \$4,000 worth of bullion. The ore body opens out better every day. The Taylor-Phumas mill is almost completed; little more than laying the water pipe remains to be done. The Green Mountain mills are both running steadily, and have been yielding better during the past week or two. The three mines are located in the form of a triangle, the Crescent being down on the flat at the foot of the mountain, the Taylor-Phumas about 250 yards northwest and the Green Mountain about 500 yards northwest and up the mountain. The main lode is consequently tapped at a greater depth in the Crescent mine than in either of the others, and it is the uniform experience there that the ore is richer as depth increases, so doubtless it will be with both the other mines. The present workings of the Green Mountain at their greatest depth are several hundred feet above even the surface ground of the Crescent mine.

## BRIGHT PROSPECTS AHEAD FOR SOLANO COUNTY.

There is no doubt that Northern Solano is entering into an era of prosperity that has never before been equalled in her history. It is but the legitimate result of the natural elements of strength and wealth that sooner or later make their influence felt. She is rich in hope, and big with promise. Nature has showered advantages upon her with a lavish hand, and she is rapidly settling up with a class of people that have the brain, the nerve and the capital to develop her almost inexhaustible resources. Considered from a sanitary standpoint, she has no equal in the State, as the State Board of Health conclusively shows. As a wheat-producing section she stands at the head. She sends the earliest and best varieties of fruit and vegetable to the market. Her wine grapes are universally pronounced the best that are sent to the San Francisco market. She is the very heart of a rich belt extending through Solano and Yolo, that produces the very best raisins now cured in California. Indeed, in this particular, she claims pre-eminence over all other viticultural counties. She is soon to be provided with a system of irrigation that will obviate all dangers that arise from a drought. The water company recently organized possesses the material for good and effective work. They will doubtless run a ditch along the ridge just east of Dixon and all that vast tract of land lying between us and the Sacramento river can easily be furnished with an abundance of water. Another ditch will also be run along the bank of the dry slough that runs through the ranches of Messrs. Summers, Merryfield, McCune, and Garnett, and this is of such an elevation that water can easily be distributed over the entire belt lying between us and the foothills. This will render every foot of land in this vicinity, available for grain, fruit, vegetables or for grazing purpose, as it has already been fully demonstrated that by means of irrigation, even adobe lands can be made to produce large crops of alfalfa.—*Dixon Tribune*.

## CANNERIES.

The Stockton Independent says: The owner of a patent canning apparatus for putting up fruit and vegetables, has been in Stockton, trying to interest people in the establishment of a cannery here. Wherever canneries have been established in this State, they have been successful. Canning is the only profitable way in which fruit and vegetables can be preserved in large quantities. It is a staple industry, and can be made to pay wherever there are large quantities of fruit. There is no doubt but that a canning enterprise would pay here if undertaken and managed on business principles.

## MINING MATTERS.

There is the expectation that there will be more activity in quartz mining in this district the coming summer than there was reason to expect a few months ago. Some of the prospecting mines which have been suspended during the winter months will resume operations while there are rumors, for which there is some basis, of one or more old mines starting up. There are also several bonding operations of good properties in course of negotiation, with the view of putting them into new and stronger hands, so that it may be said that there is no indolence or indifference as to the opening or development of the quartz resources of the district. There is no field in all California that offers more encouragement for legitimate quartz mining than this. This character of mining has been a successful business here for more than 30 years, during which time many millions of dollars have been extracted, and yet there are many veins that have only been superficially worked—to the depth of one to 300 feet. There is a wealth in the quartz veins of the district that justifies the outlay of a large capital and the efforts and labor of enterprising men. Although much work has been done in the way of exploration, it is merely the beginning of what is yet to be accomplished in this old and reliable gold-bearing region.—*Grass Valley Union*.

COMMERCIAL  
INSURANCE COMPANY  
OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, Dec. 31, 1881, \$377,457.82

Losses Paid Since Company was Organized nearly, \$500,000.

JOHN H. WISE, President  
CHAS. A. LATON, Secretary

## OFFICE.

No. 405 California Street, S. F.

## STOCKTON

## BUSINESS COLLEGE,

Telegraph Institute

—AND—

## NORMAL SCHOOL,

F. R. CLARKE, Principal.

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the year. Tuition is less than our bail usual rates. Excellent board \$10 per month.

## COURSES OF STUDY:

Full Business Course, Full Normal Course, Teacher's Course, Review Course, Academic Course, Special Courses, Languages, Telegraphy.

The College Journal, containing full particulars, sent postpaid. Address: F. R. CLARKE, P. O. Box 15, Stockton, Cal.



B. FRIEDLANDER,

The Leading Merchant Tailor  
OF SAN FRANCISCO.

STORE AND MANUFACTORY:

NO. 761 MARKET STREET.

Awarded the First Premium

—AT THE—

MECHANICS' FAIR IN 1882

At Portland, Oregon.

A FULL LINE OF

French, German and English Cloths  
ALWAYS ON HAND.Samples with Self measurement Sent Free.  
PERFECT FIT GUARANTEED.

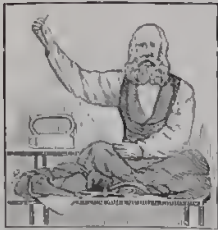
## PERUVIAN BITTERS.

AS A BEVERAGE, - - NEOTAR! AS AN APPETIZER, - - UNEQUALED!  
AS A REMEDY, - - SOVEREIGN! AS A WHOLE, - - UNPARALLELED!

AN UNFAILING CURE FOR ALL MALARIAL DISEASES, DYSPEPSIA AND DEBILITY.



**NICOLL,  
THE TAILOR,  
(Branch of New York),  
PHELAN'S BUILDING,  
816 and 818  
MARKET STREET,**



Cordially invites the public to visit his new store, where they will see the largest and choicest stock of English and Foreign specialties in Woolens for the Spring Season. Give us a call.

**WALK RIGHT IN.**  
Examine our New Styles, Prices and Quality. Civility to all. No trouble to show goods. Lightest and Largest Tailoring Establishment on the coast. Satisfaction guaranteed. Store lighted by Electricity.

**THE FAMOUS ENGLISH  
TINSEL  
SUITINGS.**

The golden threads among the green,  
Elastic colors blended in between,  
The silver threads mixed in with brown—  
All colors in wool as soft as down.

**TO ORDER:**

Pants from ..... \$ 5 00  
Suits from ..... 20 00  
Overcoats from ..... 15 00  
Dress Coats from ..... 20 00  
Genuine 6x Beaver Suits  
from ..... 60 00  
Black Doeskin Pants from 7 00  
White Vests from ..... 3 00  
Fancy Vests from ..... 6 00  
English Cords for Hunting Suits

**SAMPLES,**

With Instructions for Self-measurement  
with our Gazette of New Fashions,  
**SENT FREE.**

**NICOLL, The Tailor,  
Men's Furnishing Department,**

Also invites attention to his New Furnishing Department—Is the largest stock of the finest English make.

**MEN'S UNDERWEAR,  
WHITE AND COLORED SHIRTS,  
CASSIMERE AND BLUE FLANNEL OVER-  
SHIRTS,  
PLAIN AND FANCY HALF-HOSE,  
NECKWEAR,  
SUSPENDERS,  
HANDKERCHIEFS,  
COLLARS AND CUFFS.**

**NICOLL, The Tailor,  
Ready-made Department,  
Has a large stock of Men's, Boys' and Youths'  
READY-MADE CLOTHING**

Of the Newest Patterns and Improved Styles,  
of our own manufacture and guaranteed  
shrink. Men's suits from \$15. Boys' Suits,  
Overcoats, Hats,  
**SPECIAL ATTENTION paid to patrons  
from the country.**

**NICOLL, The Tailor,  
PHELAN'S BUILDING,  
Market Street,  
SAN FRANCISCO.**

**EDGE HILL  
VINEYARD, WINE CELLAR AND  
DISTILLERY,**

Near St. Helena, Napa County, California.

**SCHAEFFLER'S CELEBRATED VACUUM DISTILLED**

**SANITARY BRANDY**

—AND—

**Brands of Red and  
White Wines.**

**STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED**

**Burgundy, Bordeaux and  
Rhine Wines.**

**Orders Received and  
Promptly Attended to by**

**WM. SCHEFFLER,  
PROPRIETOR.**



San Francisco, - - California.

**ON THE EUROPEAN PLAN.**

**ELEGANTLY FURNISHED ROOMS.  
FIRST-CLASS RESTAURANT.  
The Handsomest Dining-room in the World.  
WM. F. HARRISON, Manager.**

**THE CALIFORNIA  
POWDER WORKS.**

**Santa Cruz Gunpowder.**

**HERCULES AND MINING POWDER.**

**SUPERIOR SPORTING POWDER.**

**ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
Kegs.**

**SHOT,  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.**

**PRINCIPAL OFFICE,  
No. 230 California Street,  
SAN FRANCISCO, CAL.**

**\$72** A week made at home by the industrious.  
Best business now before the public. Capital  
not needed. We will start you. Men, women,  
boys and girls wanted everywhere to work for us. Now  
is the time. You can work in spare time, or give your  
whole time to the business. No other business will pay  
you nearly as well. No one can fail to make enormous  
pay, by engaging at once. Costly an fit and terms free.  
Money made fast, easily and honorably. Address:  
Tuck & Co., Augusta, Maine.

**SAN GABRIEL MISSION.**

In *Harper's Magazine*, we find the following reference to San Gabriel Mission:

In the plain just under the edge of the mountains, lies the old village and old mission church of San Gabriel. The mission dates from 1761. It was founded, like all other missions of California, by friars sent out from the college of San Fernando in the city of Mexico. I well recollect the ecclesiastical buildings of this college of San Fernando. They stand yet on the principal street which was the scene of Cortez's disastrous retreat from the city, and are marked, I believe, by an inscription commemorating the site of the famous Leap of Alvarado. The buildings founded from this picturesque source are thoroughly worthy of it. The same massiveness, the same taste for bright color, the same quaint roocco details, including the peculiar battlement, which was a kind of Spanish horn of dominion. At this one six green old bronze bells hung in as many niches together. The fern-like shadows of a line of pepper trees print themselves in the sunshine against the time stained white wall. No more than the church now remains, the great agricultural establishments connected with these missions having been swept away years before the American occupation by edict of the Mexican Government. Some bits of broken aqueduct, and a few orange trees above a hundred years old, in what was once the missing garden, are the only vestiges of former prosperity. The interior of the church contains a few battered old religious paintings, always of the worst type of their kind. It is doubtful if the luxury of good pictures was ever introduced in these establishments to the excellent architecture, for which there seems to have been a natural instinct.

The village is piquantly foreign. Its single street is composed entirely of white adobe houses. One of them, with a tumbling red tiled roof, is so full of holes that it looks as if it had been shelled. All the signs are in Spanish. Here is the Zapatero, or shoemaker, and here is the Panderia, or bakery. The south walls are hung with a drapery of red peppers drying in the sun to prepare the favorite condiment. The population are a humble class, who gain their livelihood for the most part by day labor on the surrounding estates. They are not too poor, however, to retain their taste for festivity still. On the occasion of some notable wedding among them they will manage to mount on horseback, and surrounding a bridal carriage driven postilion fashion, return from the ceremony, at the old mission whooping and firing pistols in the air in the most gallant and hilarious fashion.

**WINE AND TEMPERANCE.**

During the session of the State Agricultural Convention, recently held in this city, Charles A. Wetmore delivered a lecture "On Viticulture in its Relations to Temperance." From it we quote the following extract: "I wish that we could have the clergy of San Francisco and Sacramento with us to-night, that they might be impressed with our personnel; that we are not a lot of soft and intemperate men. When I first became interested in the subject of viticulture, I asked scientific and medical men why it was that the people of France, who are the most universal wine-drinkers on the face of the earth, are the most progressive, economical and law-abiding citizens the world can produce. I found no immediate answer to my inquiries. The French drink more wine than we do, but were unable to give any explanation why that fact accounted, if it did at all, for the superior industry of their people. It was not until I got to London that I found an answer to my question. There I learned that the greatest foe to temperance was not the wines and brandies of France and California, but the heavy and unfermented beers of England and the adulterated liquors. Statistics prove beyond the possibility of question that where wine is supplied to the masses pure and cheap, morality and health average high. It is a conclusion admitted by the most advanced political economists of the day that the presence of a pure, cheap wine acts as an exclusion of an ascertained quantity of poisonous, destroying spirituous liquors sold under various names. Just in the proportion as California advances as a wine-growing and wine-drinking State, so will its prosperity and rational temperance advance. In the exact proportion that the poor are given a healthful substitute for whiskey in pure wines, will morality and temperance extend."

**SOUTHERN CALIFORNIA.**

A gentleman who has recently visited the southern portion of the State informs us that there are evidences of thrift in almost every section. Fresno City, which was recently visited by a disastrous conflagration, is rapidly recovering from the effects thereof and will soon be entirely restored. Further south there is a considerable demand for fruit and vineyard lands, and high prices are demanded. The irrigation problem is being gradually solved, and the equable climate is causing a rapid settlement of the country by immigrants. —*Sacramento Bee.*

**DO SOMETHING.**

The Colusa *Sun*, a few weeks ago, gave the following most excellent advice to a certain class of men to be found in and around every town, of any considerable size:

We see every day men idling around who will tell us that they can find nothing to do, but there is always something for willing hands to do. We know a poor man, with a large family, who took up a claim on the side of the hill this side of Bear valley. It was considered worthless, but he went to chopping wood, and, with three horses, hauling out on the plains, and to Williams, to sell; and, when he could not find a market near home, he brought it to Colusa. This looked like bringing coals to Newcastle, but it paid him better than laying around, growing at nothing to do. He would sell his wood here, and buy watermelons, cabbage, or anything else that would find sale in the other direction. This man's name is B. F. Goodire. He has done more than this. He has planted grape vines on the side hills, and demonstrated that they grow luxuriantly there without irrigation; that, in fact, the foot-hills of Colusa county considered worthless, are fine vineyard lands. If a man can't pick up a job by which he can make five dollars a day, let him tackle one at which he can make one dollar. A man is always happier at work than he is in doing nothing because he has no time to brood over his ill-luck. The idea is, instead of waiting for something to turn up, take hold, and turn up something.

**VINE GRAFTING.**

The following valuable suggestions we take from an article in a late issue of the *Santa Barbara Press*:

The planting and grafting of grape vines this year in the northern vineyards of the State, is marked for a universal demand for noted and rare foreign varieties. Many of the oldest and best vineyards in Sacramento, Napa, San Joaquin and Santa Clara counties, are extensively grafting on the old stock, using the finest and most valuable cuttings procurable from French, Spanish, and German vineyards. Different grape localities on this Coast will soon be noted, not so much for the quantity as the superior quality, of wine and table grapes, and Southern California should not be behind younger vine districts in either respect. Different varieties do not flourish equally in the same soil, and, after ascertaining whether a vineyard is best adapted to raisins, or table grapes, or to red, dry, or sweet wines, a specialty should be made of those varieties. Until this subject is studied with more care and labor than it has yet received, our grape-growers can not know the full capacities of our varied soils. The most famous European vineyards, some consisting of only a few acres, have attained their world-wide celebrity through their perfect adaptability of variety of vine to soil, in some instances the effect changing at a distance of a few rods. This is the season for riffling, and it would be wise for vineyardists to exercise judgment in improving, as far as possible, the tone, flavor, quality and richness of present bearing vines, before planting new ones.

**INQUIRIES ABOUT LANDS, CLIMATE, ETC., ETC.**

In answer to many inquiries which the editor is constantly receiving in regard to the price of land, nature of soil, etc., in Butte county, the *Oroville Mercury* says: Prices of land vary from \$2 50 to \$50. Nature of soil, from black adobe mud to red and gravelly, with intervening sandy tracts. Water in many places from running streams; there are numerous living springs in the foothills and mountains, and where neither of these occur there are ditches constructed for mining purposes that can now supply an abundance of water for irrigating and so situated as to make it possible to irrigate nearly every acre of land in this section of country. The temperature ranges from 25 degrees in winter to 110 degrees in summer above zero—seldom going as low as the former. Oranges begin to ripen in November, and are all in shipping condition by the end of December. We have no data on hand whereby we can state positively what the annual rainfall is, but approximately, will say the average is about thirty inches. There are always rains enough to mature crops of grain to this locality.

**CALIFORNIA AND FRANCE.**

In its comments on the late wine-growers convention the *Merchand*, of this city, says: With a country equal in area, soil and climate to France, we may look forward, though it will not be realized in our time, that California, instead of raising 10,000,000 or 12,000,000 gallons of the most wholesome beverage the world knows, will yield, as France did before the phylloxera ruined one-half her vineyards, 1,500,000,000 gallons of wine.



## THE FOOTHILL COUNTRY.

The newspapers throughout the State, published in the vicinity of the foothills are directing special attention to these localities for the growth of the vine and fruit trees. Until within the past few years these uplands were entirely unnoticed for the purposes of cultivation. But now that experiment has proved their great value, they are attracting special attention. The fine views, rich soil, delightful climate and excellent water resources are pushing them rapidly to the front as choice spots for the most charming homes. In the upper and central portions of the State the foothill lands are still cheap, but here in Los Angeles county they have reached higher figures, and the choicest localities are now in the possession of parties who propose to make improvements of a high order. Already several imposing structures are mounted upon the plateaus at the base of the Sierra Madre mountains, while a few of the more ambitious have selected projecting spurs for their residences. The foothills of this county, suitable for the most inviting homes, extend over one hundred miles, and if improvements continue at the present rate of advancement, a very few years will find them all occupied with a succession of charming homes that cannot be excelled on the American continent. There is a fine stretch of foothills, extending along the Calhucaga range, a distance of about twenty miles, between Los Angeles and Santa Monica. Then along the Sierra Madre we have an imposing plateau of some fifty miles, reaching from Pasadena to Cajon Pass, overlooking the splendid valleys of San Gabriel and Pomona. A project is now a foot to build a narrow gauge railroad from this city to Pasadena, which will no doubt be extended along these foothills on the most practicable line to accommodate the large population that will settle upon these lands. As the narrow-gauge will contribute materially to enhance the value of the lands and hasten their occupancy, the work or building it will perhaps begin at an early day, and it will no doubt finally extend as far as San Bernardino. There is another stretch of foothills overlooking the rich lowlands of Downey, Orange, Anaheim and Santa Ana. If the water should prove ample they will also be quickly occupied. There are many other foothill sections, on a smaller scale, that are exceedingly inviting, all of which will catch the eye of parties who desire picturesque homes. In the meantime, the rich valleys and plains, with their fatness, are being rapidly occupied. In fact, it is only the bleak mountain tops and a few alkali swamps that are not attracting special attention. Los Angeles county, with its unparalleled advantages of climate, soil, wide ranges of productive capacity, and superior rail and water communications with the outside world, is now enjoying a steady, healthy march of improvement; and the time is near at hand when the whole country will present a grand panorama of most inviting homes. But they who shall have effected a lodgment in the foothills are to be especially felicitated on their good fortune. They will have all the benefits of the low lands, with the additional advantages of daily looking out upon one of the grandest combinations of nature and art that ever set the eye of a poet in "the frenzy rolling," or added a new cunning to the pencil of an artist.—*Los Angeles Express.*

## THE LARGEST GRAPE-VINE.

Captain W. G. Phelps has a grape-vine that is now believed to be the largest in the United States, and perhaps the largest in the world. In 1876 the large vine that was famous in Southern California was cut down and exhibited at the Centennial Exposition. It measured fourteen inches in diameter. This vine of Captain Phelps' is twenty-five years old and is thirteen inches in diameter. It is of the Mission variety, and it has never received the benefits of irrigation. It stands near his house, south of Stockton about two miles, and it covers about 4,000 square feet of ground. If it had been permitted to run where it wished it would have covered a very much larger area, but it was found necessary to cut it back in order to save the roof of the house. The largest crop that it grew was two or three years ago, when, after selling a ton and a half by actual weight, the remainder was estimated at two tons and a half. Captain Phelps had the vine photographed a few days ago, and he will send copies of it East for publication, as an evidence of the adaptability of the soil and climate of this part of California to the growth of the grape.

## A PROSPEROUS TOWN.

The *Los Angeles Express* says, with considerable satisfaction, that "one of the business men in this city, who is in a position to know, informed us that three years ago about seventy-five per cent. of the property of Los Angeles county was under mortgage at a high rate of interest. Now, the mortgagees do not amount to twenty per cent., while the rate of interest seldom exceeds eight per cent. with good security. It is often six per cent. In fact, our informant thinks the property of the county is practically free, as the mortgagees could hardly all be lifted at any time."

## ALVARADO, ALAMEDA COUNTY.

A correspondent of the *Rural Press*, in speaking of the soil of this rich and productive locality, says:

Alvarado lies a few miles about south-east from Haywards. The surrounding country is low and level, being but a few feet above the sea-level. The soil is a rich, deep, sandy loam, well adapted to fruit and vegetables, and holds moisture remarkably well. Fine artesian water is found at a depth of 70 to 100 feet, which, in some instances, is used for irrigation, although the soil is of such a character as to scarcely need it, yet the increased production justifies its use where it can be had at small expense.

Large tracts of land in this part of the county, for miles around are devoted to beet culture. This is owing to the commendable enterprise of the Standard Sugar Manufacturing Co., located at Alvarado, which has created a market for sugar beets at prices that made it a profitable crop for the farmer—so much so that other crops are comparatively neglected. An industry of this kind is of great advantage to the farmer and to the country generally, and should receive support and encouragement. Manufacturers of all kinds are the great need of the country at present. Every enterprise that converts our raw material into articles of our own consumption, right at our own doors, saves freights, employs labor, and keeps money in the country.

## THE CULTURE OF HOPS.

Tehama county produces few, if any, hops. Still, there are some of the finest hop lands in the Sacramento river bottoms that there are anywhere in the State. The high price of hops will, no doubt, induce many men to engage in the business during the coming season—that is to say, many men will plant out extensive hop yards; the area of hop-growing lands will probably be doubled or trebled, and by the time the vines commence bearing, hops will go down to five or ten cents, as they were about five years ago, when a number of men were ruined financially by hop-raising. It is a notorious fact, that whenever any agricultural industry in California begins to pay the producers a good, round price, men engage in the same business, to such an extent, that the articles produced drop down so low in price, because of the great surplus, that failures in that line of business are the inevitable result. We do not make this statement to discourage hop-growing, but to put men on their guard, that hop-growing may not be overdone, as it was some years ago. It is a legitimate business, and, if men will embark in it carefully, as in other business, then it will pay handsomely, from year to year, the good years making amends for the bad ones, when hops are low.—*Red Bluff Peoples' Cause.*

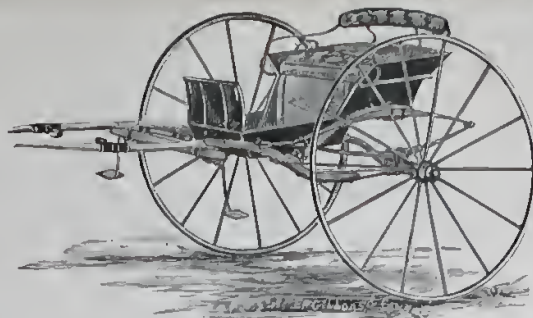
## USEFUL MINERALS.

A writer, in the holiday *Chronicle* of this city, thus speaks of California's useful minerals:

Her hills and mountains supply metals and minerals of all kinds in the greatest abundance. We have mines of silver, gold, nickel and quicksilver. We have some of the richest deposits of iron on the continent. We are amply supplied with copper and lead, while there are numerous deposits of tin as yet undeveloped. Hardly one of the minor metals known to science can be mentioned that has not been found somewhere within the limits of the State. As yet we are without true coal, but large deposits of it exist just beyond our northern and southern borders, and there is little doubt it will be found in the Coast Range or in the Sierras convenient to San Francisco, and not far distant from the iron deposits which are just being rendered available.

## QUARTZ MINES.

Never before in the history of quartz mining in this section has the quartz interests assumed a more promising outlook than at the present time. The number of quartz locations, as shown by the records, are greater during the past year than at any corresponding one for many than a decade. Many of these locations have developed ledges paying from \$10 to \$100 per ton. As is to be expected in all mining enterprises, some of the developments have proved worthless, but the large proportion of ledges discovered have, by mill tests, more than exceeded the expectations of the prospectors, and justified them in erecting building works and getting to other expenses to place their mines upon a dividend-paying basis.—*Neenah Transcript.*



**HORTICOP'S EUREKA CART.**  
Six Different Styles—The Best Style Cart now in use. Easy Riding, Simple and very Neat. With Pole, Shafts or Trumphy Top. Manufactured by the  
**RUTHERFORD AGRICULTURAL WORKS.**  
RUTHERFORD, NAPA COUNTY, CALIFORNIA.  
Price from \$80 to \$150.  
**HENRY HORTOP, Patentee.**

## HOME MUTUAL INSURANCE COMPANY

(OF CALIFORNIA.)  
Organized 1864.

JANUARY..... 1883

### FIRE ONLY

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

#### OFFICERS:

J. E. HOUGHTON..... President

J. L. N. SHEPARD..... Vice President

CHAS. R. STORY..... Secretary

R. H. MACILL..... General Agent

G. P. SPENCER, J. PATTERSON, N. W. SPALDING



17 and 19 Fremont street,

SAN FRANCISCO,

AGENTS FOR C. B. PAUL'S

CELEBRATED FILES,

Planing Knives, Currier Knives, Saw

Mandrels, and Saws of Every

Description Made to Order.

J. F. FARNSWORTH.

M. T. BREWER.

**M. T. BREWER & CO.,**

No. 30 and 32 J Street,

SACRAMENTO, - - - CALIFORNIA

**COMMISSION MERCHANTS & WHOLE-**  
SALE DEALERS IN Foreign and Domestic Grain  
and Dried Fruits, Produce, Honey, Nuts, Garlic  
and Flower Seeds. Please give us a trial. 30 and 32  
J Street, Sacramento, Cal.

**REST** and life is something by, and there is  
from you the something mighty and sub-  
lime hope behind to conquer them? But  
a week in your own town. \$5 worth free. No risk.  
Everything new. Capital not required. We will re-  
turn you everything. Many are making fortunes. In-  
vestments as small as one, and boys and girls make  
big money. If you want business at which you  
can make good pay all the time, write for particulars to  
H. HARKER & Co., Portland, Maine.

### DO YOU ADVERTISE!

Do you wish to advertise to the amount of a few dollars only? Apply to us, and we will inform you how you can invest the amount most judiciously.

### WE WILL TELL YOU HOW.

If you wish advice or information on the subject, we shall be glad to communicate with you and endeavor to give you satisfaction.

### YOU CAN SAVE MONEY.

Do you wish to advertise extensively? Send a concise statement of what you wish to do, and await our estimate before giving out the order.

### TIME.

Have you a list of papers in which you find it pays you well to advertise? Send your list and advertise in it to us. By so doing, you can save expense, time, and the trouble of attending to the business.

### ANNOYANCE.

Does it give you trouble to look after the advertising in each particular paper? Let us do your business and we examine every paper, and see that every insertion is properly given and all omissions made good.

### AND HAVE YOUR WORK DONE

Is your credit as well established that you can secure very low rates by dealing direct with publishers? If so, we want your business, and will procure you equally low rates.

### CHEAPER.

If you do much or little, we shall be glad to do it for you, and give you every advantage which our experience of seventeen years enables us to offer.

### BETTER.

Do you find it difficult to get exactly what you want? Write us in detail just what you will require and send it to us, and we will give you satisfaction.

### AND MORE PROMPTLY.

Are you annoyed by needless delays? We promise you they shall not occur if you trade with us. We always send out all orders and check all papers the day they are received.

### BY SENDING YOUR ORDERS TO

If you want the most expensive advertising, we can give you the papers to do it in. If you want the cheapest, we can do the same, and in either case it will pay you to write to us.

**GEO. P. ROWELL & CO.,**

If you live here or come to our city, we shall be glad to have you call at our offices, whether you are ready to advertise or not.

### NEWSPAPER ADVERTISING BUREAU.

We have an entire building of our own; we keep all the newspapers on file, and shall take pleasure in showing you how we do our work. If you can't come, write for our circular and catalogue, which will be sent free.

NO. 10 SPRUCE ST., NEW YORK.

## THOS. PRICE'S ASSAY OFFICE

### AND CHEMICAL LABORATORY.

524 Sacramento Street, San Francisco.

**DEPOSITS OF BULLION RECEIVED, MELTED**  
Into bars, and returns made in from twenty-four to forty-eight hours.

Bullion can be forwarded to this office from any part of the interior by express, and returns made in the same manner.

Careful Analyses made of ores, metals, soils, waters, industrial products, etc. Mines examined and reported upon. Consultations on chemical and metallurgical questions.

**WISE** people are always on the lookout for  
chances to increase their earnings, and in  
time become wealthy. Those who do not  
improve their opportunities remain in poverty. We  
offer a chance to make money. We want rich, wealthy  
men and girls to work for us right in their own local-  
ities. Any one can do the work properly from the first  
start. The business will pay more than ten times ordi-  
nary wages. Expresses within ten minutes. No one  
who engages fails to make money rapidly. You can do  
with your whole time to the work, or only spare mo-  
ments. Full information and all that is needed sent  
free. Address, STEVENSON & Co., Portland, Maine.



# FIRE AND MARINE INSURANCE AGENCY OF HUTCHINSON & MANN, Nos. 322 and 324 California Street, and 302 and 304 Sansome Street, San Francisco.

Agents for The  
Dwelling House Underwriters, New York,  
\$2,400,744 06.

Glard F. & M. Ins. Co., Philadelphia,  
\$1,101,313 26.

La Confiance Ins. Co., Paris, France,  
\$6,679,565.

New Orleans Ins. Ass'n., New Orleans,  
\$573,216.

Standard Fire Office, London, England,  
\$1,300,100.

St. Paul F. & M. Ins. Co., St. Paul, Minn.,  
\$837,893 43.

The Fire Ins. Ass'n (Limited), London, Eng.,  
\$1,312,673 14.

Teutonia Ins. Co., New Orleans,  
\$401,753 71.

Watertown Ins. Co., Watertown, N. Y.,  
\$1,006,656 23.

## MARINE.

The London and Provincial Marine Insurance Company, London,  
\$6,278,362.

La Fonciere Marine Ins. Co., Paris,  
\$2,250,000.

Capital Represented. . . \$27,650,527

SAN FRANCISCO, CALIFORNIA.

W. L. CHALMERS, Z. P. CLARK,  
Special Agents and Adjusters.

F. P. BACON, Pres. C. L. FOUTS, Sec.

# THE Globe Iron Works Co. FOUNDRY, MACHINE SHOP, and FORGE.

Manufacturers and Repairers of all Kinds of

MACHINERY AND IRON CASTINGS,  
Hoisting and  
Mining Machinery,  
LOCOMOTIVES.  
Portable, Stationary and  
Marine Engines.

BISHOP'S ECONOMICAL MINING  
PUMP APPARATUS,

Which does away with Caudex Pump Rods, V Bobs and Balance Rods, operating equally well in shafts or inclines, and affording of deflection in distant workings. Circumstances furnished free, upon application.

AND

MINING HORSE-POWER AND  
QUICKSILVER FEEDERS.

SPECIALTIES.

PATENT AIR COMPRESSORS.

222 and 224 Fremont St.,

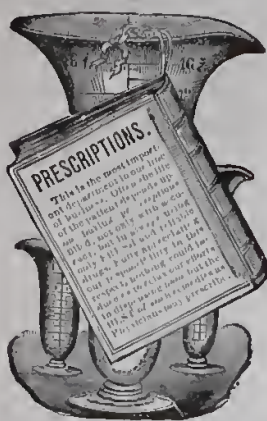
Between Howard and Paloma

San Francisco.

# JAMES G. STEELE & CO., Druggists and Manufac- turing Chemists,

RESPECTFULLY CALL ATTENTION TO  
THEIR NEW ARRIVALS OF

Foreign Perfumery, Colognes, Scented  
Tobacco Snaps, Hair, Tooth and Nail  
Brushes, Cakes, Hair Oils, Pomades, Face  
Powders and Cosmetics, Spunges,  
Patent Medicines, Etc., Etc.

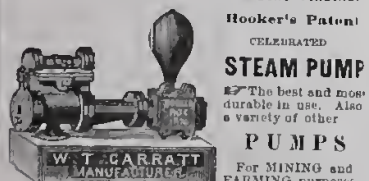


# JAMES G. STEELE & CO.'S Palace Drug Store, PALACE HOTEL.

# W. T. CARRATT'S BRASS AND BELL FOUNDRY. SAN FRANCISCO.

MANUFACTURER AND IMPORTER OF  
Church and Steamboat BELLS and GONGS  
BRASS CASTINGS of all kinds,  
WATER GATES, GAS GATES,  
FIRE HYDRANTS,  
DOCK HYDRANTS,  
GARDEN HYDRANTS.

A GENERAL ASSORTMENT OF ENGINEERS' FINDINGS.



For MINING and  
FARMING purposes  
Root's Blunt Blowers,  
For Ventilating Mines and for Smelting Works.  
HYDRAULIC PIPES and NOZZLES,  
For Mining Purposes.

GARRATT'S IMPROVED JOURNAL METAL  
— IMPORTER OF —  
IRON PIPE AND MALLEABLE IRON FITTING  
ALL KINDS OF  
SHIP WORK & COMPOSITION NAILS  
AT LOWEST RATES

# The California Lloyds UNION INSURANCE COMPANY

OF CALIFORNIA.

THE CALIFORNIA LLOYDS  
(Established in 1861).

## FIRE AND MARINE

Paid-Up Capital, . . \$750,000

PRINCIPAL OFFICE,

Nos. 476 and 418 California St.

Agencies in all the Principal Cities of the  
United States.

G. TOUCHARD, President. N. G. KETTLER, Vice-President.  
JAMES D. BAILEY, Secretary  
O. P. FAIRFIELD, General Agent  
GEORGE T. BOHEN, Surveyor

## A WOOLEN MILL.

Time and again we have given facts and figures showing conclusively the benefits and profits to be derived from a woolen mill in the Santa Ana valley, and we intend to persistently urge this project upon the attention of those seeking profitable investment for their money, convinced that, sooner or later, we shall find parties willing to inaugurate that enterprise. There is an abundance of water power, a few miles from our town, to turn a dozen mills. Last year 3,000 bales of wool, of an aggregate weight of 1,236,869 pounds, were shipped from this section by railroad and steamer, much more than enough to run a mill here during the whole year. It needs no argument to convince intelligent persons that such an enterprise will pay. It is only necessary to cite instances where such mills have paid good returns to investors. The mill at San Jose is a notable example. Stock in this mill is and has been at a premium for a long time. Another instance is that of the Ashland (Oregon) mill, where from 100,000 pounds of wool fabrics were made of the value of \$40,000 to \$50,000 last year. The Oregon City woolen mill, last year, purchased 1,000,000 pounds of wool, manufactured it, and paid their employees \$75,000. Rarely has there been a failure in this line of enterprise. The establishment of such an industry in our valley means money in the pockets of those who invest in its stock, and a benefit to the people of this town, by the building up of a prosperous community in the neighborhood of the mills, as has been the case at San Jose. There has never yet been any difficulty of disposing of the products of woolen mills established in our State. Indeed, their products have not only found a ready market at home, but orders have been constantly received from abroad. All hail the day when the Santa Ana woolen mill shall be established.—*Santa Ana Herald.*

## THIS GREAT AND GLORIOUS COUNTRY.

With her crop of 6,000,000 bales of cotton, toward 600,000,000 bushels of wheat, and over 1,500,000,000 bushels of corn, we may look upon our enormous and astonishing imports as not alarming. The owners of American railway property have a right to feel particularly happy results, and those who feel discouraged at the comparative slowness of our export markets may possess their souls in peace. As Europe must take our surplus, we need not be in a hurry to send our new cotton and our foodstuffs abroad, and we need not send anything on which we have not made a good profit. The future is decidedly in our favor. Our farmers have and will have an abundance of everything; our mechanics and laborers will have cheap food; our factories are busy and will so continue; our transportation companies begin the best season on record; our merchants and tradesmen will have better buyers and more customers than during the last twelve months; and our financial institutions will be busy and prosperous.—*Boston Advertiser.*

## THE FOOTHILL LANDS.

The Grass Valley *Tidings* says that there are many hundred acres of land in the lower part of Nevada county, where grapes can be profitably grown. Wine, raisins, and grapes are in demand all over the world, and no country can produce them equal to California. The *Tidings* adds, in speaking of the lands in its vicinity suitable for such purposes, that they can be had at very low prices. Some of that land is owned by the Central Pacific Railroad Company, and such can be bought on most favorable terms. The "out of doors" part of this county, which is capable of great results in connection with grape culture, is very extensive, and awaits only proper effort to make fortunes for those who will put in the work.

## RAISINS.

The Oakland Tribune says: Mr. Mason, formerly a painter of San Francisco and Oakland, a few years since purchased, at a low figure, ten acres of hillside land in San Pablo township, and turned his attention to the culture of raising grapes. His vineyard came first into full bearing the past season, the yield being over 50 tons of grapes, producing twelve tons of excellent raisins. Mr. Mason's net return for the year's labor and attention, was \$2,000. An experienced wheat-grower, whose success has been uniformly fair, declares that 40 acres in vines are preferable to 500 acres in wheat, both for profit and continuity of crop. What splendid opportunities have the young men of California! Better far than those offered by the learned professions.

## AN ENGLISH VIEW OF CALIFORNIA.

An Englishman, who recently visited our State, writes as follows to the *London Standard*:

For my own part, I can conceive no region more inviting to the settler than the beautiful valleys of Southern California, where bountiful nature appears as though she could not do enough to bless the toil of her children.

In that magnificent valley which runs from north to south of the Golden State, every variety of climate is to be obtained, and the man who likes a moderate degree of cold can suit himself by buying land in the upper part of the Sacramento valley, where winter is marked by frost and occasionally snow; while he who prefers semi-tropical warmth will find it in the south of the great San Joaquin valley. Both will find that for long months together they can tinker in such unchanging sunshine as they scarcely dream of beneath the gray skies of Britain.

It almost seems, however, as if the whole of California was destined for cultivation, so admirably are both soil and climate adapted to the growth of all manner of fruits and cereals.

When I think of the toil I have seen expended on clearing even a corner of a highland farm, (to yield a miserable crop of oats which might, as likely as not, have to be cut green in October), it sounds too good to be true to know that here is a rich soil, which needs no clearing of brushwood or drawing of stumps; no costly buildings, no burns, no storing, even of fodder.

## FARMER'S PROFITS.

We take the following from the *Kern County Record*.

Every farmer in Kern county who owns land and has industriously employed his time, succeeded last season beyond all reasonable expectation. Many have made the cost of their farms. One man, Mr. Stockton, sold his farm last spring for \$4,000, and the purchaser redized \$9,000 for the alfalfa seed on it. Mr. S. Jewett has a section of land on the north side of the river, one half of which he has planted to alfalfa. He cut the clover three times last season, which averaged two tons per acre for each cutting, making six tons per acre. The cost of cutting, stacking and hauling to the depot upon contract, amounts to five dollars per ton, and the price paid at the depot is ten dollars per ton, in car-load lots. This leaves net five dollars per ton and thirty dollars per acre for the season. These are not mere estimates. They are actual facts, and are by no means exceptional in the valley. The demand for hay is increasing, and must increase for many years to come. The Atlantic and Pacific railroad will be finished to the Colorado early this year, and this valley will be the base of supply for the whole distance. Good alfalfa lands are sold here for from \$15 to \$25 per acre, and the first crop will pay for them.

## SMALL FARMS AND HAPPY HOMES.

"There is no surer way," says one of our exchanges, "of promoting and securing the general interest and prosperity of California than by settling small farmers upon her rich lands, and building homes. When the time comes that pleasant farm-houses shall dot our landscapes everywhere; when there are level estates stretching like empty empires over miles and miles of our best and most fertile soil; when more land is tilled, and new industries spring up, as they naturally will with the influx of population, then we shall begin to realize the vast possibilities of this section, and see the fulfillment of some of our best hopes." No truer words were ever spoken or published, and we regret that we are now unable to credit them to their proper source. Slowly, but surely, the sentiment that land monopoly and the maintenance of great ranches are an injury to the State, and delaying the development of its resources, is gaining ground among the people.—*Sacramento Bee.*

## VALUE OF BLACK SAND.

The *Mountain Democrat* says: The black, magnetic sand, that is found in abundance in the washings of our gold mines, is, by a new process, utilized in the manufacture of cast steel direct from the sand. Eight pounds of sand yield five pounds of steel. The slag that is left is valuable as a cement for fire-proof roofing. The inventors predict that their discovery is destined to revolutionize the steel trade on this Coast.



## THE FOOD SUPPLY OF EUROPE.

Under this heading a writer in the *Santa Ana Herald*, furnishes that excellent paper with the following article:

When a whole group of nations is increasing in population and decreasing in production it becomes a serious question how to supply the people with food. This is the present position of Europe. The population of Europe is, on an average, increasing 3,000,000 annually. The present grain and meat production of all the European countries fall short of the present production of these articles about 700,000 tons of meat and 343,000,000 bushels, or 8,500,000 tons, of grain. This deficit represents the amount of the present average imports of these two articles from other countries. This deficit is equal to about one-twelfth of the whole production. In other words, Europe supplies her own people with food eleven months in the year, and buys enough to carry them through the other month. In the face of this fact it is known that the meat production and grain production are decreasing instead of increasing. England represents the greatest deficit compared to her population, but the fact that all Europe is falling behind, and can not supply the people with food shows that England can not depend on a surplus from Russia, Hungary, Holland or Denmark to make up her deficit, and must therefore go to another continent for it. She must come to America for a large share of her meat and grain over what she produces herself. While England is failing in agriculture she is increasing her commerce, and is doing the carrying trade for the continent. In this way she may not be only holding her own in wealth, but actually increasing it. England built last year more vessels than ever before in one year—the new tonnage being, in round numbers, 1,000,000 tons. Thus while the United States will make money off of Europe by her agriculture, England will make money off of Europe by carrying our agricultural products to the European markets.

## VITICULTURE IN LOS ANGELES COUNTY.

L. J. Rose, Commissioner of Los Angeles Viticultural District, in the course of a recent communication to the *Semi-Tropical Californian*, says:

I would estimate that there are 9,000 acres of vines now in this county. Of these 6,000 acres were in bearing last year, yielding say 60,000,000 pounds of grapes. This would give at least 4,000,000 gallons of wine if all had been made into white and red wine. It has, however, been made largely into sweet wines and brandy, say 300,000 gallons brandy; 500,000 gallons of port, angelica, sherry and muscatel; 2,000,000 gallons of white and red wines. Further experience has confirmed the former opinion that this county can make light bodied table wines, both white and red, and of any degree of spirit strength wished for.

Owing to the better understanding, more experience, in the making of wine, and new varieties of grapes adapted to specialties, there is a continued improvement in the quality of our wines. Lands can be procured here at reasonable prices, in fact, very low prices as compared with other sections of our State, and our shipping facilities will compare favorably, both in cost or facilities, to any other portion of the State; whereas the climate is unsurpassed anywhere for the whole year, for although we have, perhaps, a more uniform warmth throughout the year, yet the mean temperature does not exceed that of Napa for the summer.

## MUSSEL SLOUGH RAISINS.

The *Vivida Delta* states that among those making the very best of raisins, in the Mussel Slough country, is Mr. Peter Scanziglioni, whose place is half a mile north of Grangeville. From about two and one-half acres of white Muscat vines, he sold, last season, about six and one-half tons of table grapes from this vineyard, at one and one-half cents per pound, amounting to \$200. He has also cured 250 boxes of excellent raisins, twenty pounds to the box. This shows a yield in money value of \$700, or an average of nearly \$300 per acre.

## A RICH BLAST.

The *Amador Dispatch* says that a blast was put in at the old Spanish mine, near the Mokelumne river, now owned by W. A. Nevils & Co., a few days ago, and from three tons full of dirt and rock which was thrown out, the neat little sum of \$8,000 was realized. The blast seems to have struck a pocket of extraordinary richness.

## HUMBOLDT RAILROADS.

The inauguration of railroad enterprises in this county is already attracting the attention of capitalists who are in search of a profitable field for investment; and now that a new era is dawning upon this county, bringing its extraordinary resources prominently before the public, there is no denying the fact that Humboldt will, at an early day, be connected with the main railroad lines of the Pacific Coast. Speaking upon this subject, in which every property-owner in the county is interested, the editor of the *San Francisco Chronicle*, of recent date, says:

The northern counties of the State are about to enter upon a career of rapid progress. The Central Pacific is being built to the Oregon line, and branch roads will be built to tap the surrounding country along the main route. Another event of much importance to the north-western portion of the State recently occurred. Two railroads have been projected from Humboldt bay, to run southward to the Eel and Van Duzen rivers. One of these roads, of the standard gauge, which is already incorporated, will make Eureka its northern terminus for the present, but ultimately it is designed to extend it northward to connect with the Oregon road now being built from Roseburg. The other road is a narrow-gauge, and will start from the southern end of Humboldt bay, extending to the dense timber forests on the Eel and Van Duzen rivers. Both these roads will traverse rich agricultural fields, and will, without doubt, bring into market a large tract of arable land which at present is inaccessible. Other things will also contribute to the growth of Humboldt county. Humboldt bay has recently been made a port of entry, and the facilities for shipping are being extended. These things assure Northwestern California a rapid development.—*Humboldt Telephone*.

## ANOTHER PETRIFIED FOREST.

Information has reached us of the finding of a new "Petrified Forest" about half a mile this side of the original collection of curiosities bearing that name, which this latter discovery, according to report, fully equals if it does not exceed in the perfection and variety of its petrifications. It is upon the ranch of Mr. W. T. Hudson, and was discovered by his nephew while out deer hunting, the chase leading him over a section of his uncle's land which, owing doubtless to the extremely rugged nature of the ground, had apparently never before been explored. His attention was first arrested by the sight of a large pine stump, some three and a half feet in diameter and six feet high, which, while it had retained all the appearance of wood, was nevertheless turned completely to stone. Further investigation revealed the fact that all around the ground was thickly strewn with petrification, trees two feet and more in diameter lying upon the ground entirely perfect as to limb and bark, but changed to solid stone. In some of the logs are cavities, evidently originally hollowed out by fire, since they contain ashes. Only one acre and a half of land had been gone over at the time our informant left, and it is not known how large an extent of country the newly-discovered "Forest" covers. It is said that Mr. Hudson, proprietor of the land thereabouts, is as pleased with the discovery as if it had been a gold mine.—*Sonoma Democrat*.

## A PROSPEROUS LOCALITY.

During a ride from Martinez to Concord, Contra Costa county, recently, the editor of the *Antioch Ledger*, says:

We were forcibly impressed with the evidences of thrift that are visible in the way of permanent improvements—such as fine dwelling houses, orchards, vineyards, nest and substantial fences, etc. Even Pacheco seems to feel the wave of prosperity, and some of its old and decayed buildings have been repaired so as to present a much better appearance, and are again occupied. In Concord building is also going on. A fine store and hall structure is just being hard-finished, and the new Presbyterian church is approaching completion. The improvements indicated show that the people of this county, as well as elsewhere in the State, are realizing that they come here to make their farms and surroundings homelike.

## THE ONTARIO OUTLOOK.

The following is from the *Ontario Fruit Grower*, San Bernardino county:

It takes time to establish and build up a new settlement. On the first of December, the Ontario tract was as yet not ready for sale. Since that time 395 acres of land, and several town lots have been sold for an aggregate of \$68,825, and many are still looking over the tract and getting ready to purchase. A better start has never been enjoyed before by any new enterprise in this country, and those who settle here need not fear but that they will have plenty of neighbors from the start. Not only this, but they will have the advantages of a railroad station, stores, post-office, express office, and, in a few months, a first-class school in a large fine building that would be creditable to an old settlement.



BROAD GAUGE.

## Winter Arrangement.

Commencing Sunday, Oct. 22nd, 1882, And until further notice, Passenger Trains will leave from, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
6:50 A. M.	San Mateo, Redwood, and Menlo Park.	6:40 A. M.
8:30 A. M.		9:05 A. M.
10:40 A. M.		10:02 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:50 P. M.		6:52 P. M.
8:30 A. M.	San Jose, San Jose and, and Principal Way Stations.	9:05 A. M.
10:40 A. M.		10:02 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:50 P. M.		6:52 P. M.
10:40 A. M.	Gilroy, Pajaro, Castroville, and Monterey.	10:02 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:50 P. M.		6:52 P. M.
10:40 A. M.	Hollister and Tres Pinos.	10:02 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:50 P. M.		6:52 P. M.
10:40 A. M.	Watsonville, Los Angeles, and Salinas, Alameda and Way.	10:02 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:50 P. M.		6:52 P. M.

\*Sundays excepted. †Sundays only (Sportman's Train).  
Stage connections are made with the 10:40 A. M. Train, except Fawcett Stages via San Mateo, which connect with 8:30 A. M. Train.

## EXCURSION TICKETS.

Sold on Saturdays and Sunday mornings—good to return Monday—  
To San Clara or San Jose, \$2.50  
To Monterey or Santa Cruz, 5.00  
Also to principal points between San Francisco and San Jose.

Ticket Offices.—Passenger Depot, Townsend street and No. 2 New Montgomery street, Palace Hotel.  
A. C. BASSETT, H. R. JUDAH,  
Superintendent, Asst. Pass. & Tkt. Agt.

S. P. Atlantic Express Train via Los Angeles, Yuma, etc., leaves San Francisco daily via Oakland Ferry, foot of Market street, at 9:30 A. M.

## OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY FOR JAPAN and CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 2 P. M.,  
YOKOHAMA & HONGKONG

Connecting at Yokohama with Steamers for Shanghai.

Will sail from San Francisco, 1883,  
ARABIC, Thursday, January 18,  
OCEANIC, Tuesday, January 22,  
COPTIC, Saturday, February 10,  
GAELIC, Tuesday, March 6,  
BELGIC, Saturday, March 17

## SPECIAL NOTICE.

The Steamship *Gaelic* from San Francisco March 6th, also the Steamship *Belgic* of March 17th, will continue on from Hongkong, via Suez, to Liverpool, offering superior accommodations and quick time for Tourists en route "Around the World."

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cabin plans on exhibition and passage tickets for sale at C. P. R. Co.'s General Offices, Room 74, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 403 Market street, Union Block.

T. H. GOODMAN,  
Gen'l Passenger Agent

LELAND STANFORD,  
President

## THE NEVADA BANK

—OF—

## SAN FRANCISCO.

Paid Up Capital \$3,000,000  
Reserve (U. S. Bonds) 3,500,000

Agency at New York, 63 Wall Street  
Agency at Virginia, Nevada.

ISSUES COMMERCIAL AND TRAVELERS Credit, Days and nights Exchange and Telegraphic Transfers

This Bank has Special Facilities for Dealing in Bullion.

SAN FRANCISCO, California.



## QUICK TIME AND CHEAP FARES

FROM

## AUSTRALASIA, CHINA &amp; JAPAN,

TO

## NEW YORK

AND

## LIVERPOOL

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

## CENTRAL PACIFIC RAILROAD

CONNECTING WITH

## Union Pacific Railway

AT OGDEN, UTAH,

AND

## SOUTHERN PACIFIC RAILROAD

CONNECTING WITH

## Atchison, Topeka and Santa Fe Railroad,

AT DEMING, NEW MEXICO,

AND THE

## Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

## THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway Lines in the Eastern States, for all the Cities of the

## UNITED STATES AND CANADA.

CONNECTING AT

## NEW YORK

With the several Steamer Lines to

## England, France,

AND ALL EUROPEAN PORTS.

## Silver Palace Sleeping Coaches,

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience to the Passenger, with all accommodations pertaining to a well-furnished chamber, with comfortable couches, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Patrons. Children under Twelve years of age, Half Fare. Under Five years of age, Free. 100 pounds of Baggage per full Passenger free. 50 pounds of Baggage per half Passenger, free.

## PRINCIPAL TICKET OFFICE

AT THE

## OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

Where passengers, calling in person, can secure choice of routes and sleeping-car accommodations.

A. N. TOWNE, T. H. GOODMAN,  
Gen. Superintendent, Gen. Pass. & Ticket Agt.  
SAN FRANCISCO, CAL.



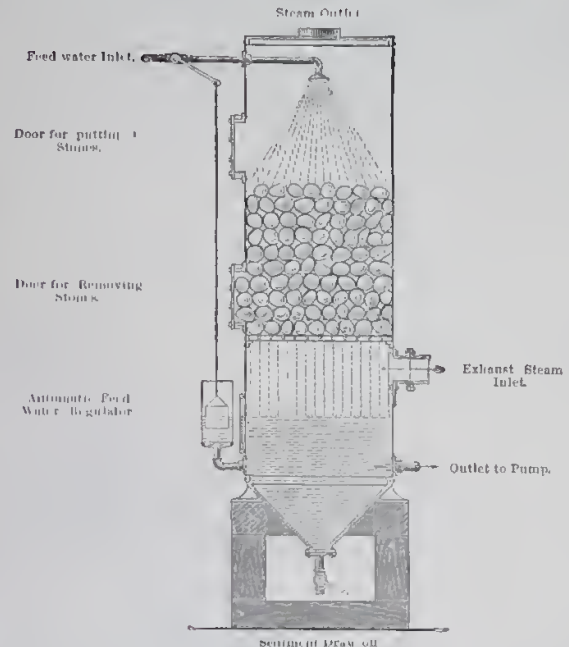
F. S. CHADBOURNE & CO.,  
741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



**IMPORTERS, MANUFACTURERS,**  
AND—  
**Wholesale and Retail Dealers in**  
**FURNITURE AND BEDDING**  
**OF EVERY DESCRIPTION.**  
**Chamber, Parlor, Library and Dining**  
**Suits,**  
**IN AN IMMENSE VARIETY OF STYLE,**  
Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish  
Easy and Lounging Chairs, Etc.—Hotels and Private  
Residences Furnished.—Designs Furnished  
and Estimates Given.

**F. S. CHADBOURNE & CO.,**  
741, 743 and 745 Market Street, - - - San Francisco.  
CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

**LLEWELLYN FILTER-HEATER,**  
Patent Issued Aug. 12, 1879, Re-issued Aug. 14, 1881.  
**For the Prevention and Removal of**  
**STEAM BOILER INCRUSTATIONS**  
**WITHOUT THE AID OF CHEMICALS.**



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent. of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.  
Further particulars with full descriptive circular and price list can be obtained at the office of the  
**LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,**  
330 PINE STREET, ROOM 7,  
SAN FRANCISCO, - - - CALIFORNIA.  
Descriptive Catalogue Sent on Application.  
Manufactory, Columbia Foundry, 133 and 135 Beale Street.

WM. D. ISAACS. J. D. CULP. S. K. TADGTON.

**J. D. CULP & CO.,**  
**MANUFACTURERS OF HAVANA CIGARS,**  
And Importers of  
**LEAF TOBACCO.**  
**No. 16 Front Street, - - - SAN FRANCISCO.**

The "GIRLS"  
are a Four and  
Three-quarter  
Inch Cigar.  
Made from Pure  
Tobacco.  
—  
**NO DRUGS.**  
—  
**NO ARTIFICIAL  
FLAVOR.**  
—  
**TRY THEM.**



Send for a  
Sample Or-  
der, and  
Give our  
"GIRLS"  
a Trial.  
—  
**YOU WILL  
WANT MORE.**

Manufactured by  
**J. D. CULP & CO.,**  
No. 16 Front Street, - - - SAN FRANCISCO.



## CALIFORNIA AND ITS MANY ADVANTAGES.

A writer, in the Walnut Creek (Contra Costa county) Independent, furnishes that paper with the following article regarding our highly favored and richly endowed State:

California is the second largest State in the Union, Texas only being larger. It is nearly as large as the Eastern and Middle States combined. Its length is about 760 miles; its average breadth, 230; and its area, about 155,000 square miles.

It is more than two-and-a-half times as large as all the New England States, in which is included the State of Massachusetts, with a population of 1,800,000. It is more than four times as large as the great States of New York and Pennsylvania together, which support a population of only 10,000,000. It is larger than the three agricultural States of Illinois, Ohio and Missouri, with whose boundaries over 7,000,000 of inhabitants live comfortably, and have an abundance of room to spare; and which States still invite immigration within their borders.

California has as much sea coast as the New England States, New York, Delaware, New Jersey and Maryland combined.

The San Francisco Bay is a better harbor than any on the Atlantic Coast; and the San Diego Bay is as good as any.

The number of acres of agricultural lands, including tule and foothill lands, as given by the United States Surveyor General, is larger than that of the two most prosperous and populous States in the Union—New York and Pennsylvania.

The number of acres of timber lands exceeds that of Minnesota and Wisconsin together, or that of all the New England States.

The mining region of California covers nearly as much territory as the mountains within her borders; and embraces a country as large as Michigan and Pennsylvania, which two States are noted for copper, iron and coal. The mountains of the Golden State produce more gold than any other country in the world, and are rich in silver, lead, copper, iron, quicksilver, and other metals. In fact, the variety of precious and base metals is quite as great as that of Europe or Asia.

The climate of California is as balmy as that of Italy. The soil is deep and rich as that of France. The climate and soil will produce a greater variety of products than any other one political division in the world.

The storms are less frequent and severe than those of Spain, Portugal or Japan. The surface of the country is not below the sea-level, and requiring the expense of maintaining hundreds of miles of diking, and immense levees, as does Belgium or the lower part of Germany.

The natural wonders are as marvelous and as great in number and variety as those of the Alps and Apennines.

With these varieties, equalities, advantages and superiorities, California invites population from all the civilized world; and people from any clime may find a congenial home, similar, in many respects, to the one they left behind.

It is evident the future of California will be a grand one—at present it is but an infant in population and wealth, and its capabilities are almost unlimited in number and value to the human race.

The following figures show its superiority in size, and its inferiority in population, compared with some of the greatest, richest, happiest, and most prosperous nations on the earth:

	Sq. Miles	Pop.
California.....	155,000	800,000
San Salvador.....	7,335	600,000
Guatemala.....	44,774	1,100,000
Wales.....	7,317	1,800,000
Cuba.....	12,383	1,400,000
Greece.....	19,000	1,700,000
Chili.....	120,000	2,100,000
Ceylon.....	25,000	2,600,000
Switzerland.....	16,000	2,800,000
Scotland.....	31,374	3,000,000
Portugal.....	30,000	4,400,000
Ireland.....	32,515	5,400,000
Spain.....	193,000	10,600,000
England.....	50,922	24,500,000
Prussia.....	135,000	25,750,000
Italy.....	111,000	29,300,000
Japan.....	145,000	35,000,000
Syria and Palestine.....	124,100	3,000,000

## THE "WEST SIDE."

From parties living near Hill's Ferry, in Stanislaus county, we learn that crops in that vicinity are looking well. They have the means of securing crops thereabouts, in the Farmers' Canal, which runs from about eight miles above Firebaugh's Ferry, a distance of between 35 and 40 miles, to a point eight miles below Hill's Ferry. Our informants say this canal is 50 feet wide on the bottom, and is now carrying from four to five feet of water. They have plenty of water for purposes of irrigation, and, as it requires only one wetting to secure a crop, they are amply repaid for the trouble and expense. Last year work on the canal was stopped because some land-owners refused to allow the company the right of way through their lands; but now, seeing the promises of crops which have been irrigated, these farmers are anxious to give the company anything they may ask. We are also informed that the canal can be extended along the foothills to a distance of several miles below Firebaugh, and that plenty of water can be had to irrigate the whole country. The water is now used at such times as it is not needed in the San Joaquin river, and it is thought no harm could result in the navigation of the river. If the scheme be feasible, as the farmers say it is, and as the distance from the present terminus of the canal to Firebaugh is only about 35 miles, it is not far from Hill's Ferry, in our country, must necessarily leave the benefit of this improvement before long. Farmers along the line of the canal pay two dollars and a half per acre, for the privilege of using the water for the season. It would seem to anyone that this must become a good investment for capital which is now seeking low rates of interest.—*Stockton Independent*

## GOVERNOR STANFORD'S VINEYARD.

In speaking of the largest and best vineyard in the world owned by one man, the *Telama Toccra*, published in Red Bluff, says:

Vina is a railroad station with a few hundred inhabitants. Aside from other railroad stations it mainly owes its importance and influence to two facts—that is its rich soil and susceptibility of irrigation, and that it is mainly owned by ex-governor Stanford, the railroad magnate, who is determined to spare no money to make that section blossom into full productivity. Of course the few owners of land in that section, who hold land from Stanford's influence will receive their reward, for they will profit by the energy and enterprise of the millionaires. A few years ago the railroad magnate, Gov. Stanford, bought the main portion of the Cerke grant. This included some of the most productive land that ever laid out down, and cost the purchaser upwards of \$200,000. Since that important purchase, the railroad magnate has given that section a mighty boom. He bought the Cerke grant on a speculation, and has made the most of his bargain. We are reliably informed that Governor Stanford has visited Vina but twice since he made his purchase. Before he visited the place at all, his agent had 1,000 acres of land in vines. In the meantime an elaborate irrigating scheme, with main and counter ditches, had been provided; and now the whole tract can be freely irrigated from the celebrated waters of Deer creek. Twice,

## THE RAISIN GRAPE.

A writer in the daily *Examiner*, who has had a good deal of experience in grape culture and raisin-making, says:

We have hitherto urged and advised the planting of grapes by all who have suitable lands in the State, believing that they will, if largely cultivated, do much to increase the wealth and prosperity of all concerned. More especially could we advise the planting of those varieties found suitable for making good raisins. During the recent session of the State Viticultural Society, in Dushway Hall, Mr. Wetmore took occasion to state that wine could be made from raisins, and that we may yet see the wines of this State exported in boxes. This statement was probably received with much surprise by many of those present. Yet Mr. Wetmore might truly have made a much more advanced and positive statement, for the business of making wine from raisins is now far beyond the experimental stage, and has become a regular commercial industry. In the report by United States Consul Taylor, for 1882, the list of raisins and Raisin Currents at the port of Merced are given at 37,391,327 kilograms, equal to 75,000,000 pounds. Of these the dried skins that 30,000,000 kilograms, or about 62,000,000 pounds, may be set down as used in the preparation of raisin wine. He then describes the process of soaking raisins in water until they have again the appearance of a fresh grape, after which the usual process of making wine from



THE QUIET OF MIDSUMMER.

since Governor Stanford possessed this rich inheritance has he visited it, and yet improvements have rapidly progressed. Last year he had planted 1,000 acres of vineyard, and this year he will have 1,500 acres more. This will make the largest vineyard owned by any one man in the world. And it is said that the railroad magnate has selected some of the best varieties, so that it is likely that his vineyard will not only be the largest but the best in the world, owned by one man. It is remarkable that Gov. Stanford should select so favored a section for grapes. The soil is the richest that could be exposed to the sun, and every inch is susceptible of irrigation from a living stream of water. Our correspondent went through the vine vaults, and saw 20,000 gallons of wine, made from the old vineyard. He was fairly dazzled with the loaded stock he met at every turn. This only demonstrates that this magnificent ranch will not only be expected to raise fine raisins and wine grapes, but that the finest stock will be provided for. A tract of 600 acres has been planted to alfalfa (all irrigated) which indicates that Stanford intends to have a first-class ranch in full back on should the Railroad Commission check him too tight. Mr. Smith superintends this entire possession, and the fact that Governor Stanford has visited it but twice, is evidence that he gives entire satisfaction. A lot of new buildings have been built, which we have no room to refer to at this time. But sufficient it is to say that Governor Stanford is preparing a possession at Vina that will not be second to a princely place when it matures.

grapes is followed, a little more care being wanted. The only defect in wine made in this way is a lack of color, or, at most, straw-colored. This is remedied by artificial coloring, and the local authorities are very watchful and careful to prevent the use of poisonous coloring materials, scarcely a week passing without some wine being condemned, as adulterated, and poured into the sea. The raisin wine is also largely used in its natural state," says the *Examiner*. "That is to say, without being colored by artificial means, by simply mixing it with red wine that is so deep in color that the infusion of a certain quantity of red wine really improves both. At all events this industry is now thriving, and, when properly followed, is undoubtedly beneficial to the industry of the country in which the use of wine has become so general as to be almost indispensable." This and much more information is contained in the report dated March 15, 1882, November 24, 1881. This demand in France for raisins is an account of destruction of the French vineyards, to a great extent, by the phylloxera.

It will be seen that our only trouble will be to get the raisins grown and cured. The markets of the world will take all that can be produced. Even the most zealous prohibitionist will hardly venture to attack the raisin business; and, aside from this use for them, the demand for cooking and table use is a formidable, Providence and philanthropy alike demand that our people should try in every way to increase the production of wealth by the extension of our industries, so that employment and subsistence can be found for the

increasing population now crowding in upon us. It has been remarked that "he who makes two blades of grass grow where but one grew previously, is a benefactor to the race." So is he, likewise, a benefactor who contrives to get as much value from one acre of land as was formerly, or under another kind of cultivation obtained from three acres. With raisins this is especially the case. We hear of crops which are worth \$300 to \$350 per acre. It no doubt requires extra care and labor to get such results, and on that account this business suits the man of small means. If we can induce the wider cultivation of this kind of grape, we shall test that we have done some good to the State.

## THE NORTHWEST.

The following interesting colony (between Mr. Robert K. Strathorn, editor and proprietor of the *Rocky Mtn.*, published at Denver, Colorado Territory, and a representative of the *Denver Evening News*) we find in the *Journal*.

"It's a big country, isn't it?" Mr. Robert K. Strathorn, who has just returned from two months' tour of the Northwest, smiled. It was a complacent smile, not unmixed with pity, and perhaps a little contempt.

"Big, do you say? Well, yes, I should say it is rather large." Crossing his leg comfortably, and looking at the reporter thoughtfully, he continued, "The drainage of the Columbia river covers an area of 60,000 square miles. That doesn't look very big, does it? No it doesn't convey a very graphic idea of the size of the Northwest. But you'll understand it better when you look in your atlas and learn that it is larger than all of the New England States, New York, Pennsylvania, New Jersey, Ohio, Indiana, Illinois and Iowa. That's about the size of the Northwest, comprising Idaho, Montana, Oregon and Washington. There's enough room there for almost everybody, for the country is more adapted to and is more susceptible of civilization than even thickly settled New England is. Why, if its valleys were settled closer than those of France, they would contain 35,000,000 people; or those of England, 75,000,000—about 25,000,000 more than we now have in all the United States. There is no limit to the greatness of the future which this country has the qualities to achieve. It has been two years since I made a tour of the Northwest. Did I see any change? Yes, more than I can tell you of, and more than you would have room to print. I can mention one change which will give you a general idea of the development of that country in that short period, and that, too, before the era of railroads had dawned. On this trip I saw miles and miles of farms along the Columbia river, on land which, when I was there ten years ago, was considered absolutely worthless. It is surprising to me how that far-off country made its advance. The obstacles which stood in the way seemed insurmountable. In the first place, it was comparatively unknown, and not all correctly known. Added to this was the difficulty which the settler had in reaching it. There was not much to tempt a man to travel 500 miles by stage in a country which common report said was wet enough to drown him, or cold enough to freeze him if he should escape death by the first frost. But in the face of these supposed dangers 35,000 have settled in the Northwest in the past year."

## MR. COOPER'S OLIVE INTEREST.

The *Santa Barbara Press* gives the following interesting statement, concerning the operations of Elwood Cooper's olive industry:

On a recent trip to Elwood, Mr. Cooper's farm, twelve miles west of Santa Barbara, a general surprise awaited us. There could be no room for doubt that Mr. Cooper had been very successful in the management of his farm of 2,000 acres, as the four-horse wagon-loads of English walnuts and almonds coming into town recently from his place gave abundant evidence, but were not prepared to spend half a day on such a farm, with its tens of thousands of trees of various kinds, its hundreds of acres in cereals, and its large dairy of blooded stock, and after a close look at many parts of it, never see a single weed, even by the roadside. This was a real surprise; but the astonishing thing to see was his olive orchard, of about 50 acres, all the trees clean, healthy, and strong growers, the branches bending with the enormous weight of the fruit, many of the seven-year trees having a full barrel to the tree, the larger olive and ten-year-old trees having on them two barrels of olives apiece. On the other hand, in Santa Barbara, trees much older will not produce a barrel to the tree, and shortly because they are not kept free from the black scale, nor properly pruned and cultivated. For example, near Major Fennell's on the south, is a plot with two or three acres of olive trees on it, and the ground on which they stand is a cow-pasture, the trees are fruitless and worthless, and near the light-house more than 200 trees, about ten years old, have just been dug up and cut up into firewood. All this neglect and destruction around Santa Barbara would be exceedingly discouraging, had not Mr. Elwood Cooper courageously set himself to work to destroy the scale bug instead of the tree, and he is now rewarded with the astonishing crop hanging on his 5,000 trees, and just ready to be all right. Our readers are aware that a barrel of olives will produce about four gallons of oil, worth 50 dollars a gallon, or twenty dollars in the well-labeled tree seven years old, and much more to the tree after ten years old. As Mr. Cooper has published in these columns his method of dealing with the great enemy of the olive, the black scale, it is only necessary to add here that he now a few pumpkins (not on a box placed in a wagon to throw a strong decoction of water into the tops of his trees, and think that two men can remove 200 trees in a day in this way, and leave them free from the pestiferous black scale. He has just completed an oil mill on a large plot, and in the most substantial manner, which is capable of running 4,000 pounds of olives over 24 hours, will be run day and night for a week or a time, until his crop for the year has been turned into oil. And olive growers get and are the olives and olive trees at Elwood.



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, APRIL, 1883.

ESTABLISHED, 1870.  
Office—320 Sansome St., Hallock Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM.**  
**Six Months, \$1.25—Postage Paid.**  
**SINGLE COPIES, 20 CENTS.**  
**ISSUED MONTHLY.**

in width. It is drained from the north by the Sacramento, the largest river in the State, and from the south by the San Joaquin, the longest river in California, which, after meeting and uniting in the center of the basin, break through the Coast Range to the Pacific. At the junction of these two great rivers lies San Joaquin county, which is bounded on the north by Sacramento, on the east by Amador, Calaveras and Stanislaus; on the south by Stanislaus, and on the west by Alameda and Contra Costa counties; having an area of 928,000 acres of surface; 876,287 acres

Mokelumne and the Stanislaus rivers join the San Joaquin with a flood sufficient, in certain seasons, to render them navigable for a considerable distance, and furnish a supply of water adequate to the irrigation of the lands lying between them, embracing the richest section of the county. The soil of the river bottoms of the San Joaquin, Stanislaus, Calaveras and Mokelumne rivers is a rich sandy loam, well adapted to the growth of sweet potatoes, hops, corn, peanuts, flax, hemp, jute, rye, chicory, melons, and small fruits, vegetables and all manner of root crops, producing enormous

the fact, that fruit and vegetables mature earlier than elsewhere. The bottoms along the other streams, traversing the county, and the islands of the San Joaquin river, are one continuous garden, yielding large crops of vegetables, of all kinds, annually. We find that San Joaquin county occupies one of the most favorable and important positions of any locality in the State, on account of its accessibility to the various markets of the world; its navigable streams; its excellent railroad facilities; its large area of tillable soil of the most productive character, one-fourth of which consists



1. County Hospital.
2. Hull's Wheel Factory.
- 4-6. State Insane Asylum.
10. Henderson's Carriage Works.
12. Lane's Mills.
14. Avon Theatre.
16. Auetins' Hardware Store.
20. Court House.
24. Mansion House.
25. M. & W. Iron Works.
26. Commercial Hotel.
30. Mozart Hall.
31. Yosemite Hotel.
39. Masonic Temple.
37. I. O. O. F. Hall.
40. Pacific Tannery.
43. Gas Works.
44. Woolen Mills.
45. Paper Mills.
47. S. & O. R. R. Depot.
48. Sperry's Mills.
51. Crown Mills.

BIRD'S-EYE VIEW OF STOCKTON, CALIFORNIA—FROM A PHOTOGRAPH BY J. PITCHER SPOONER.

## SAN JOAQUIN COUNTY.

The Great Grain Depot of California.

THE CITY OF STOCKTON,  
Her Manufactories and Business Enterprises.

Other Towns and Villages Described.

[By the Travelling Agent of THE RESOURCES.]  
California, as is well known, is divided by two great ranges of mountains, viz.: the Sierra Nevada on the east and the Coast Range on the west, running parallel with the State from north to south. Between these two ranges of mountains lies the great basin bearing the double name of the San Joaquin and Sacramento valleys, although, really, but one geographical formation. This great valley is some 400 miles in length and from 50 to 60 miles

of this is owned and assessed, thus leaving only 51,813 acres of waste land, which is river bed and some broken land in the northeastern and southwestern portions of the county. San Joaquin is one of the wealthiest counties in the State, the total value of all property in the county being \$29,643,221; value of personal property, nearly \$6,000,000 more; the rate of taxation is \$1.30, being the lowest in the State. The census of 1880 gives San Joaquin a population of 24,373, which has increased fully twenty per cent. in the last three years, and would give this county 32,000 people at the present time. San Joaquin is

### Watered

By the San Joaquin river, which passes through the entire length of the county, from south to north, spreading into three channels a few miles above Stockton, and taking in its embrace two of the largest islands in the State. No streams of any importance enter it from the west, but on the eastern side, within the limits of the county, the

monly without irrigation. While the county ranks among the first in the State as a wheat-growing county, the yield of wheat ranges from fifteen to forty bushels per acre, and in exceptional localities as high as 50 and 60 bushels have been produced. Although the grain-growing interest predominates over all others, stock-raising forms no inconsiderable part of the industries of the county. Improved fine-bred horses, cattle, sheep and swine, which have been imported from other countries, have given the live stock of this section a wide-spread reputation. For the past few years many of the finest horses in the State have been bred in this county. Dairying and the raising of fine cattle are carried on to some extent, while sheep husbandry is quite an important industry. One of the growing industries of the county is the production of garden and other vegetables, melons and fruits for the San Francisco markets. The alluvial banks of the San Joaquin river are peculiarly favorable for this purpose, on account of

of alluvial swamp and overflow lands, capable of reclamation and cultivation, and already largely reclaimed.

### Stockton.

As we furnish our readers with a splendid bird's eye view of the city, we shall devote a large share of our article to the manufacturing and commercial interests of this, one of California's commercial centers. Stockton is the county seat of San Joaquin county, and is located at the head of Stockton channel, on the line of the Central Pacific Railroad, 92 miles from San Francisco by rail, and 117 miles by water. This channel is a wide and deep arm of the San Joaquin river which is navigable for vessels of 600 tons capacity. The city extends over an area of four square miles, and is laid out in regular blocks of 300 feet square. It was incorporated in 1850. Its streets are wide, and the principal ones are macadamized; some of them lined with beautiful shade trees. The character of its buildings is generally very substantial and



good, the business portion being built almost entirely of brick. A system of street railroads affords easy communication between various parts of the city. Stockton is conceded to be the most important grain market of the Pacific Coast, outside of San Francisco. Her convenient location has been taken advantage of by her enterprising merchants, who have established facilities for cheap and rapid handling, storage and brokerage of grain unsupplied by any city on the Coast. The warehouses of Stockton are built of brick, and are made fire-proof, the storage capacity being over 100,000 tons. The deep, navigable channel, radiating from the river to different points in the city, gives a convenient water front of many miles in extent, such as is not possessed elsewhere in the State. Substantial wharves have been built at public expense, having an aggregate length of nearly a mile, and, as the demands of traffic require, they are constantly being extended. In facilities for transportation, Stockton is unusually fortunate.

#### Railroads

Radiate from this center in all directions, north, south, east, and west, connecting with the entire San Joaquin and Sacramento valleys, with the mountain country on the east, with San Francisco on the southwest, and with the Eastern States by both the Central and Southern Pacific Railroads. The

#### California Steam Navigation Company

Is running a daily line of steamers between Stockton and San Francisco; besides there are innumerable craft plying between here and the metropolis, carrying thousands of tons of grain to San Francisco, and returning with coal, lumber, and merchandise.

The public roads leading out of the city are being rapidly improved, and are generally in good condition, excepting in very rainy seasons. There are, however, four turnpikes leading in different directions, which have been gravelled and are kept in good condition, and afford pleasant drives at all seasons of the year, and another is projected which will undoubtedly be completed within the next six months.

#### Manufacturing

The manufacturing industries of Stockton are second only to San Francisco. This being a central location, convenient to the great Mount Diablo coal fields, fuel may be delivered cheaply by water communication; in fact, the facilities for freight fuel material of all kinds, either by water or rail, are not excelled by any locality on the Coast. Stockton has made rapid strides in her manufacturing during the last five years.

#### Flour Mills

Nothing could better illustrate the steady and substantial growth of Stockton's industries than the progress made in the production of flour. What patient industry and economical management can accomplish is signally shown in the grand results achieved by Messrs. Sperry & Co., proprietors of the Stockton City Mills. The first venture in grain-milling was a small barley mill, conducted by the late Austin Sperry, and Mr. Baldwin, in 1852. This was before the adaptability of the soil and climate of the great valley of the San Joaquin and adjacent foothills to the production of a superior quality of wheat was known, or even thought of. Little did the people, then eager in their search for gold, dream that in a few years later wheat would become the chief staple product of the country, or that the great wheat-producing sections of the world would soon find in California a competitor that would excite wonder and agitation in every grain center on the globe. The little barley mill of Sperry & Co. at first received its supply of grain from Chili, and subsequently small lots were received from Salinas, Martinez, and other points in the bay counties. In 1853 they concluded to enlarge the mill, and put in one run of stone for making flour. The first wheat ground by the company was obtained from one of the bay counties. In 1854 they again enlarged the mill to a capacity of 100 barrels of flour per day. Gradually enlarging their business, they erected, in the fall of 1855, a brick warehouse adjoining the mill; the warehouse is still standing as a monument of their early enterprise. The mill was again enlarged in 1856, at which time Mr. Baldwin retired, and Messrs. S. W. Sperry and Alexander Burkett became associated with Mr. Austin Sperry in the business. At that time the capacity of the mill was increased to 150 barrels of flour every 24 hours. During the same year the mill produced flour from the first wheat obtained from San Joaquin county, although most of the wheat used in the mill up to 1858 was brought from Martinez, Napa, Salinas, Sonoma and Petaluma.

In 1866 the firm bought the property known as the Franklin Mill (the site upon which the present mill stands), which was thoroughly remodeled and new machinery substituted for the old, and its capacity increased to 400 barrels of flour per day. The Franklin Mill was erected by Timothy Paige and others, and operated for a brief period, but through lack of experience in the business and other causes, the enterprise was a failure.

The capacity of the mill was increased from time to time until 1874, when the daily product was 500 barrels. In 1874 Alexander Burkett sold out his interest to Austin and S. W. Sperry, and during the same year the mill was again remodelled; what is known as the "New Process of Milling," being adopted, and the capacity of the mills increased to 600 barrels every 24 hours. In this way the mill was run up to April 23, 1882, when it was destroyed by fire, a calamity which cast a cloud of gloom and sadness over the entire community.

At this juncture a brief period elapsed before it was known what course S. W. Sperry, upon whom devolved the entire management of the business, intended to pursue. The spirit of anxious inquiry throughout the entire city and county was soon set at rest by the announcement that the establishment was to be rebuilt upon an enlarged and improved plan. From the very outset of their career in Stockton, Messrs. Sperry & Co. had challenged men in all branches of business to excel them in honorable dealing—had thrown down the gauntlet to rivals in the production of flour of superior quality, and had shown pluck and perseverance in building up an industry, which had grown not only into a means of securing to themselves a pri-

vidual in mortar and cement. The most scrutinizing supervision was exercised in the selection of the building material, and none but the best used. The stairway to all the floors in the mill building is placed in the northwest corner of the structure in such a way as not to interfere with the milling operations. The different departments are divided by strong walls, the passages through which are provided with heavy iron doors, by which each department can be speedily and effectually isolated from the others in the event of fire. The entire brick and carpenter work was done by the day's work, under Mr. Sperry's personal supervision.

This is the largest and most complete flour mill on the Pacific Coast. Its capacity is 1,000 barrels per day. In point of solidity and strength it is safe to say that it is not surpassed by any mill structure in the United States. Neither is it surpassed in the quality of its productions.

The excellence of the flour is attested by the popular demand for it both at home and abroad. Not alone is its merits recognized throughout the extent of the Pacific States and Territories, but its superiority has been admitted in the chief commercial emporiums east of the Rocky Mountains as well as in Europe and Asia. It has already found its way into the heart of the great Mississippi valley; has fed the hungry mouths of Great Britain and France, and it is seldom a steamer takes its departure from the Golden Gate to the Flowery Kingdom without carrying away more or less flour from Stockton City Mills.

The capital invested is \$500,000; amount paid for grain, etc., \$370,000; average number of men employed, 45; amount paid for labor during the past year, \$16,000, and value of product during

The establishment is a very important addition to Stockton's milling industry.

#### Lane's Mills

Lane's flour and feed mills, on Weber avenue, were established in 1863, by the present owner, who has continuously operated them. The capital invested is about \$50,000; and the average number of hands employed, ten. Last year the sum of \$9,500 was paid for labor, and the sum paid for grain during the same period amounted to \$145,000. The engine which propels the machinery is 12 horse-power. The mill is one of Stockton's permanent institutions, and a ready market has always been open for all the flour and feed that it has been able to produce. The flour is unsurpassed in quality.

#### Barley Mills

In 1881 Messrs. Campbell and Laug (the latter a practical miller), established the Barley Mills on Hunter street. The capital invested is \$10,000, average number of hands employed, eight; amount paid labor in 1882, \$2,850; value of product, \$90,000. The mills are operated by a 35 horse-power steam engine. The articles produced are ground barley, corn, oats, corn meal, and Graham flour. During the year the mills ground 2,500 tons of barley, 200 tons of corn, and 100 tons of wheat.

#### Stockton Wheel Company

Another important addition has been made to Stockton's manufacturing industries. The Stockton Wheel Company is owned and operated by Holt Brothers, 27 and 29 Beale street, and 30 and 32 Main street, San Francisco. They are importers of and wholesale dealers in all kinds of hardwood lumber, wagon and carriage material and hardware. The company purpose manufacturing the genuine Saxon's patent wheels (all sizes), wood-hub wheels (from the lightest to the heaviest), also bodies and gearing for all kinds of vehicles. They will keep on hand a general supply of material, and have now at the factory, and on the way, material for 6,000 sets of wheels, and 5,000 bodies and gearings. The building is light, airy and commodious, and is furnished with all the latest-improved machinery, which is driven by a 40 horse-power Corless engine. They are determined to make the best goods in this line that can be obtained. The body and gearing department is in charge of one of the most thorough and competent body makers in the United States. Stockton was chosen for the erection of the factory on account of the dry, warm climate, and its central location. It is absolutely essential in making a wheel that will stand the hot rally of this State, that the stock is thoroughly seasoned before being used. No iron work will be done at all, as has been supposed by many. Messrs. Holt Bros. have invested here upwards of \$65,000, and expect to give constant employment to 30 or 40 men. The factory is in the hands of young, enterprising men, who never fail to carry through, successfully, whatever they undertake.

#### Paper Manufactory

The paper mill, owned by the California Paper Company, in this city, was first run by R. B. Laws, in 1873. It was the first and still remains the only paper mill in this section of the State. The first cost, \$75,000, has since been doubled, and it is to-day a flourishing institution. The machinery, which was first operated at Lane's flour and feed mill, on Weber avenue, was removed to a new building erected on the right bank of Mormon channel, especially for the manufacture of paper, in 1878, and the capital now invested is \$150,000. The mill affords constant employment for 165 hands, and the sum of \$1,000 is paid monthly for wages. During 1882, \$150,000 was paid for raw material. The product consists of newspaper, manilla, and straw wrapping paper. Several of the metropolitan journals, and a number of the interior daily and weekly newspapers of the State use paper of Stockton manufacture alone. The engine used in operating the machinery is 300 horse-power. The business of the California Paper Company is on a sound basis, and the permanency of their manufacturing assured.

#### The Pacific Tannery

Situated at the intersection of El Dorado and Oak streets, (Kullmann, Wagner & Co., proprietors), was established in 1855, and has been nearly in constant operation since that time. The capital invested is \$100,000, and 50 men is the average labor employed. During 1882 the amount of money expended for raw material reached the sum of \$175,000. The articles produced consist chiefly of sole-leather, harness leather, skirting, collar-leather, tips, end-leathers, and shoe-leather. The engine used on the premises is 25 horse-power. Like other labor institutions established in early days, the Pacific Tannery has not been visited from admires. It has been three times burned



STOCKTON CITY MILLS, SPERRY & CO., Proprietors.

vate fortune, but virtually partook of the character of a public benefaction in the way of providing the means of livelihood to many families, and greatly adding to the commerce and wealth of the city, and it can be readily understood that their conclusion to re-establish the mill upon an complete a plan as architectural and mechanical skill could devise and execute, was a cause of universal congratulation.

The firm consists of S. W. Sperry and Mrs. Austin Sperry, widow of the late Austin Sperry, the former partner, whose interest she retains. S. W. Sperry, the chief spirit and manager, is assisted by two of his sons, George B. and Austin B. Sperry. The San Francisco office is in charge of Mr. James Hogg and Mr. James W. Sperry, another son of S. W. Sperry.

The new mill stands on the site of the one recently destroyed by fire, and is an imposing and substantial structure. It was erected at a cost of \$260,000. There is only the width of the street between it and the water front, from which point there is unbroken water communication with San Francisco. Transportation by railroad can be had to the north front of the building. The latter is divided into three departments: the first the mill proper, which is 50x100 feet and five stories high; the second contains the cleaning machine and the packing room—40x100 feet and three stories high; and the third the warehouse department—117x100 feet and two stories high. The foundation walls are laid upon a solid foundation of concrete two and a half feet thick. The walls of the main building are 30 inches thick for a height of two stories, and drop off one brick in thickness for each of the other three stories, and the bricks are

the same period, \$375,000. The engine by which the machinery is propelled is 450-horse power.

#### Crown Milling Company

This company was organized in the summer of 1882, with a capital of \$300,000, divided into 3,000 shares of \$100 each. The directors are James M. Welsh, Robert Balfour, Robert Brice, Abraham Schrabacher and Sigmund Schrabacher. The company purchased a site for the mill close to the water front, on the south side of Stockton channel and on the west side of Tule street. The entire ground covered by the building is 200x106 feet. The mill proper is 60x80 feet and five stories high. The engine room and the space for the boilers occupy 26x50 feet in the northwest corner. The department allotted to grain-cleaning machinery is 30x50 feet, and adjoining this is the packing department, 30x56 feet. The latter departments are three stories high. A warehouse, two stories in height and 110x201 feet, adjoins the mill on the west side. The Stockton & Copperopolis Railroad passes along the south side of the building, and on the north side a bulkhead and wharf have been constructed on the water front the entire length of the building. Flour can be conveyed on slides direct from the packing department to steamers or sailing craft on the north side, or to the railroad cars on the south side. A moveable site for a flouring mill could not be obtained in the interior of California. The capacity of the mill is 1,000 barrels per day. The work of building has been forwarded with all possible expedition, and the whole has been under the supervision of James M. Welsh, Esq., one of the incorporators. The walls stand upon a concrete foundation, and the entire superstructure is of the most substantial character.



down, the last misfortune occurring in 1874. Immediately succeeding each disaster it was rebuilt in better shape than before, and now the building stands a credit to the indomitable perseverance and enterprising spirit of its owners. The market for the product of the institution extends throughout California, Oregon, Washington Territory, Utah, Texas, and Missouri. Were the product ten times the present amount, the firm would find a ready sale for it all.

#### Stockton Woolen Mills.

In 1870 Messrs. Lambert, Doughty & Tattersall invested about \$30,000 in the erection of a woolen mill on the south bank of Mormon channel. The mill began operations in October of that year, and during 1871, with only one set of machinery, there were manufactured 6,000 pairs of blankets of superior quality. In September, 1871, the capacity of the mill was doubled, and subsequently the products per week amounted to 112 pairs of blankets, and 1,700 yards of flannel. The mill was again enlarged, and is now what is known as a "two set" mill, with 800 spindles. It is now owned by William Doughty, of San Francisco, and is under the personal management of James Tattersall, a practical and skilled manufacturer of large experience. The capital now invested is \$30,000, and the sum paid for wool in 1882 amounted to \$32,000. The amount paid for labor was \$12,000, and the value of the product \$40,000. During the year there were 7,000 pairs of blankets and 105,000 yards of flannel manufactured. The owner contemplates a further enlargement of the capacity of the mill at an early date, when he proposes to keep the machinery in continual operation, day and night. The goods produced are shipped in bulk to San Francisco, and then rapid rise in popular favor attests the excellence of their quality.

#### Agricultural Machine Shops.

The manufacture of agricultural implements gives employment to a large number of mechanics. Stockton takes the lead on this coast in this industry. There are five firms engaged in the manufacture of agricultural implements, such as combined headers and thrashers, plows of every description, derricks, forks, trucks, etc.

Matteson & Williamson's Works are the most extensive, they having been established in 1852, when Stockton was a mere village of tents. These gentlemen now have a fine, three-story brick block, 75x100 feet, with a basement on Main street, where they are manufacturing their "Stockton Chief" Header and their celebrated Stockton Reversible Plow, which is now so extensively used all over the Sacramento and San Joaquin valleys. Besides these they manufacture an endless variety of other plows, harrows, cultivators, steel road scrapers, warehouse trucks, derricks, forks, etc. They have a foundry, down by the railroad, where they make all their own castings. Taken altogether, these are among the most complete agricultural works on the Coast.

#### Globe Iron Works.

John Cane's Globe Iron Works, at the upper end of Main street, near the steamboat landing, is also an old-established house, having been constantly engaged in the manufacture of iron and brass castings of every kind, steamboat, mill, mining, and agricultural machinery since 1856. Mr. Cane has recently opened an agricultural store on El Dorado street, where he has a large assortment of gang plows, single and double plows, wagons, and agricultural implements of every description. He is giving constant employment to from 35 to 40 mechanics.

#### The Stockton Iron Works.

Of Farrington, Hyatt & Co., on California street, are largely engaged in architectural work for buildings, stationary and marine engines, agricultural implements, etc. They have an extra fine lot of patterns for light pulleys, hangers, shafting, etc. They give employment to from fifteen to fifty hands.

#### The H. C. Shaw Plow Works.

Established some twenty years ago, are making a specialty of their Stockton Gang Plow, of which there are now over 3,000 in use in California. They also have the First & Bradley slipshoe gang plows, and the Handheld headers, silky and single plows, silky horse rakes, mowers, reapers, belt-ings, and, in fact, everything in this line that can be found in a first-class agricultural store. This establishment is located on El Dorado street, near Main.

The agricultural works of George Lissenden, who has been established since 1875, are manufacturing plows, harrows, wagon-beds, road scrapers, and agricultural implements of various kinds. Daniel Houser's Combined Header and Thrasher.

This machine will head, thrash and sack from 25 to 40 acres of grain in a single day. This gentle-

men sold ten machines last year, which all give good satisfaction, and this year is manufacturing them more extensively. New, large and commodious buildings have been built, on Center and Sonora streets, where the machine is being manufactured for the trade. The following are among some of the proofs of the work of this new labor-saving machine:

Mr. DANIEL HOUSER, Stockton, Cal.

Dear Sir: The combined header and thrasher we bought of you has proved to be just the machine for saving grain and the wheels of the ordinary thrashing mill. The much can't be said in favor of this header—such is our experience. We cut 12,000 acres in 10 days, making 19,250 sacks, the past season, with a twelve-foot cut (24 horses) on tile land, and 16 horses on upland. We cut and thrashed 1,000 acres of grain in 60 days, at a cost of 76 cents per acre, also with less waste than ever before on our ranch in one season. We cheerfully recommend the combined header to our brother farmers, as being the best machine they can have for securing the grain. J. L. HUGHES & SON

TURLOCK, STANISLAUS CO., CAL.

January 21st, 1882.

Mr. DANIEL HOUSER, Stockton, Cal.

Dear Sir: We bought and used one of your combined headers and thrashers last season, and we are free to admit that no machine could equal it in securing our harvest. We cut and thrashed 1,000 acres of grain in 60 days, at a cost of 76 cents per acre, also with less waste than ever before on our ranch in one season. We cheerfully recommend the combined header to our brother farmers, as being the best machine they can have for securing the grain. J. L. HUGHES & SON

#### Granger's Union.

The Granger's Union of San Joaquin valley was established in 1874, with its headquarters in Stockton. The capital invested is \$80,000. During 1882 there were eight hands employed and the sum of \$9,000 was paid for labor. The amount paid for merchandise, during the year, was \$75,000, and the sales during the same period aggregated \$100,000. The Union deals in builders' hardware, agricultural implements, wagons, buggies, coal, iron

or mechanics employed, and their work is giving the very best satisfaction.

There are several other firms engaged in this branch of business, and the product of the carriage and wagon manufacturers of Stockton finds a ready sale wherever its excellent character is known.

J. T. Eichenbath is an importer and dealer in all kinds of carriage material, oak, ash, and hickory wagon lumber, and carriage hardware generally.

#### Planing Mills—Sash, Door, and Blind Factories.

The business of manufacturing moldings, sashes, blinds, and doors, and the dressing of all kinds of lumber for building purposes, is followed by two firms in Stockton. Steam-power is employed in each. In this industry 39 hands are employed, and the capital invested is about \$40,000. About \$50,000 was paid for the material used in the two mills in 1882, and the value of the product was \$39,000. The wages paid for labor aggregated \$25,000. The business is rapidly increasing, and the firms engaged in this industry take a very encouraging view of the outlook. The engine used to propel the machinery, in one mill, is 45-horse power, and that in the other is 40-horse power. The demand for prepared material for new farm dwellings throughout San Joaquin and neighboring counties has kept both establishments running, to their utmost capacity, during the past two summers, and although there is quite a falling off in the demand for rustic, flooring, ceiling, planed material and scroll work for mechanical use during the winter months, yet there is sufficient to keep the mills in operation most of the time.

White & Thomas, proprietors of the longest-established mill, have an extensive trade throughout the surrounding country, and some of the products

The business has paid during the year, and the proprietors are managing for an increasing trade in that line.

In 1878 Messrs. Nash, Wright & Co. commenced the manufacture of wheat-cleaners, barley-crushers and grain elevators. They have \$20,000 invested in the business.

T. O. Humphry manufactures drapers, for headers and thrashing machines, and employs several men during the season.

#### Breweries.

There are two breweries in this city, producing from 7,000 to 10,000 barrels of beer annually—the San Joaquin, Yost & Worth proprietors and the El Dorado, owned by D. Rottenbush.

#### Saddlery and Harness.

There are five harness manufacturing establishments in Stockton, the aggregate capital invested being \$70,000. The wages paid by these establishments last year came within a fraction of \$20,000, thirty men being employed in the business. The amount paid for material aggregated \$63,000. H. T. Dorrance's saddlery and harness shop was established in 1852, and that of Dan Riordan, successor to Thomas Cunningham, was established the same year. These are the two oldest in the city. J. H. Andrews & Son have also been in the business many years, and have a large and constantly increasing trade. This firm makes a specialty of manufacturing collars which are in great demand. The annual sales include many articles not manufactured by the firms, and the whole for the last year aggregated about \$100,000. The largest sum paid by any firm for new material was \$30,375, by Mr. Dorrance, who employed twelve men, and paid nearly \$8,000 for labor. The trade in these goods extends all over the Pacific Coast, into Arizona, Utah and New Mexico.

#### Boots and Shoes.

The annual manufacture of boots and shoes will probably not exceed an aggregate value of \$25,000. This, however, does not, by any means, include the entire boot-and-shoe trade, as there are five firms exclusively engaged in the business whose trade extends all over the central portion of the State.

#### Manufacture of Tinware.

In this industry there are about 50 men constantly employed, and about \$70,000 invested. There are five firms in the business, viz.: John Jackson, Fred A. Ruhl, James T. Mills, Robert Rowe, and the Westlake Stove Company, C. M. Jackson manager. The wages paid in 1882 aggregated about \$36,000, and the sale of home-manufactured articles closely approximated \$150,000. The business embraces the manufacture of pumps galvanized iron, sheet iron, zinc, lead and brass work. The demand for the product of this industry was unusually active in 1882.

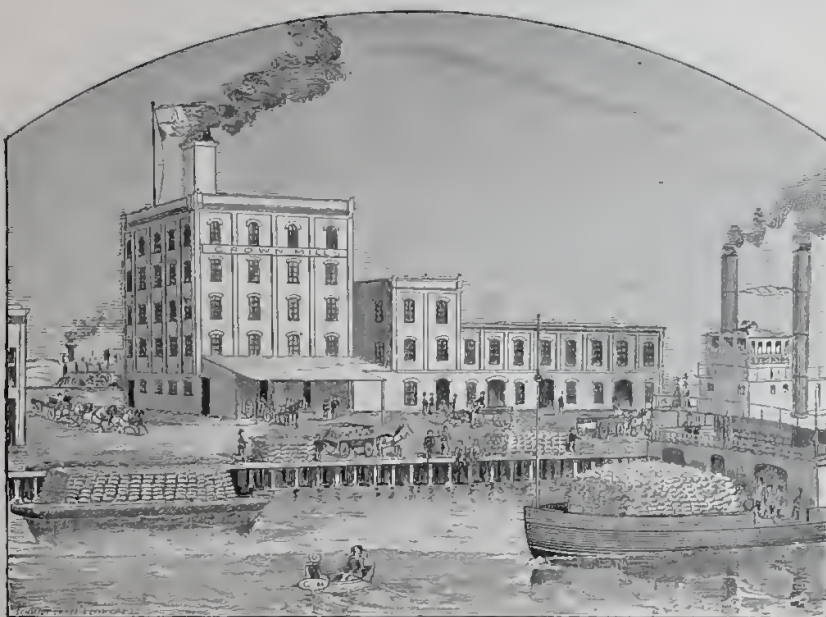
The total manufactured product of the city of Stockton for the year 1882, as taken from Major N. M. Orr, Secretary of the Stockton Board of Trade, (whose report we largely draw from), amounted to \$3,175,000, which will be largely augmented the coming year, as the new mills will be in full running. The itemized value of manufactured products is about as follows:

Mill Products.....	\$2,000,000
Paper.....	210,000
Carrages, Wagons, etc.....	100,000
Leather.....	175,000
Sash, Door, Blinds, etc.....	270,000
Woolen Goods.....	60,000
Windmills, Tanks, etc.....	75,000
Furniture.....	150,000
Saddlery.....	100,000
Marble.....	50,000
Boots and Shoes.....	25,000
Agricultural Implements.....	45,000
Tin, Iron Pipe, etc.....	190,000
Fur.....	200,000
Beer.....	50,000
Clothing.....	40,000
Proprietary Articles.....	50,000
Gross Manufactures.....	100,000

#### Grain Trade.

One of the leading industries of Stockton is the grain trade, which amounts to over 100,000 tons annually.

The present magnitude of the trade has not, however, been secured without encountering sharp competition, and, if Stockton continues to hold her position as the most important export market in the interior of the State, it will only be because her citizens are fully aware of the importance of that trade, and are willing to work together for its preservation. The time is past when the location of this city will be sufficient to bring business to its citizens without the exercise of intelligent effort upon their part to compete with those who, by means of railroad connections, are placed in communication with those customers of Stockton who formerly were obliged to come here, or pass through here, for the transaction of their business. While railroads are generally conceded to be monopolies in the business of transportation, they are not likely to aid the formation of monopolies in general trade at points located upon interior routes of water communication. Stockton still possesses great advantages for conducting a large and profitable busi-



CROWN MILLS, STOCKTON, CAL., WELSH & CO., PROPRIETORS.

and steel. The business of the corporation has varied from \$75,000 to \$225,000 per annum, and is under the supervision of the following named gentlemen who constitute the Board of Directors: Andrew Wolf, Ezra Fiske, W. D. Ashley, H. W. Cowell, W. L. Overhiser, B. F. Langford, James Marsh, Charles Grune and John N. Woods. H. S. Sargent and W. T. Smith are the managers.

#### Carriage and Wagon Works.

Of Stockton are ahead of any city on the Coast, outside of San Francisco. M. P. Henderson, who has been established here since 1869, has a three-story brick block on Main street, where he is giving employment to a large number of mechanics, building stage-coaches, carriages, wagons and buggies of every kind and style. His extensive establishment covers five lots.

W. P. Miller has a similar establishment on the corner of California and Channel streets. Mr. Miller has been here in this business since 1852, and has now a trade extending from Oregon to Mexico, and to the Islands, Arizona and Utah. His stage-coaches, carriages and freight wagons are known all over the Coast as the best in use. Mr. Miller is extending his business by adding another brick building to his large establishment.

Joseph Hansel's carriage and wagon works, on Hunter street near Milner's avenue, are also quite extensive. Mr. Hansel has been in the business since 1852, and is the patron of Hansel's buggy springs, which are acknowledged to be the nearest and most durable spring now in use, and are entirely different from the elliptic spring, so common now.

Lancel & Reber, two enterprising young men, have recently engaged in the manufacture of carriages, wagons, and buggies. They have a number

of their mill have been used in the completion of most of the best buildings in Stockton, as well as the other leading towns of the San Joaquin valley.

#### Manufacture of Furniture.

Stockton has two extensive manufactures of furniture, where a good variety of articles in that line are produced. The Stockton Furniture Company, now operated by Doane & Logan, commenced business in 1874, and have manufactured a large amount of furniture of almost every kind.

These establishments produce elegant sets from mahogany, rosewood, walnut, laurel, etc., but make the various articles from pine and other California lumber to meet the general demand. A. Easton and Messrs. Kennedy & Miller make upholstering a special branch of their business. The aggregate capital employed in the entire business is not less than \$80,000; amount paid for material, \$45,000; and for labor, \$50,000. The sales of furniture, during 1882, aggregated over \$300,000.

#### Windmills, Tanks, Etc.

The capital invested in these mechanical industries is about \$30,000. Twenty-four men are employed, and the wages paid during 1882 aggregated \$40,000; \$75,000 is an approximate estimate of the value of the products. There are six firms engaged in the business—Smith & Wilson, successors to J. S. Davis; Abbott, Williams & Stowell, E. J. Marsters, C. M. Small and two smaller establishments. Smith & Wilson confine themselves to the windmill business exclusively, while Abbott, Williams & Stowell manufacture tanks as well as windmills. E. J. Marsters manufactures land-rollers, self-feeders, elevators, derricks, nets, tanks and troughs, and is now putting in a twenty-horse-power engine, planes, saws and other machinery to meet the demands of his business. C. M. Small constructs what is known as the "Star Wind mill."



ness in the purchase and sale of the varied farm products of the surrounding country, but those advantages will be easily overcome by the adoption, on the part of our citizens and city officers, of a narrow-minded, suicidal policy which will virtually tax that business merely because of the location of the city upon a navigable channel leading to San Francisco.

The wheat trade of Stockton, which first became an important factor in promoting the city's prosperity in 1868, has of course fluctuated as the production has varied by the effects of drought and unfavorable seasons, yet for every prosperous year for the farmer for a period of fifteen years past, the receiving and handling of the crops of the surrounding country has been the most important business of the city. The receipts and shipments of wheat have varied from 100,000 to 200,000 tons, and from the fact that this large amount of grain has, during the season, been here sold and the money therefor put in circulation, an impetus has been given to other branches of business which has been of incalculable advantage to all classes of citizens, and important aid to the growth and prosperity of the city. The storage capacity afforded by the different warehouses of Stockton aggregate about 115,000 tons, as follows:

Farmers' Co-operative Union.....	45,000 tons
Miller's Warehouse.....	15,000 "
Stockton Warehouse.....	24,000 "
Bag's Warehouse.....	15,000 "
Sperry's Warehouse.....	8,000 "
Miscellaneous.....	6,000 "

The location of the warehouses, alongside navigable channels enables the wheat to be moved at any time during the year when the price is satisfactory to the seller. The rates of storage, one dollar per ton for the season, are very reasonable, and it is a noticeable fact that on account of the amount of wheat attainable, and the critical observations made by the local dealers, a better price has been here obtained for that product during a period of ten years than could have been obtained at other points in the State to which this staple article has been shipped by the farmers.

Should the completion of the Southern Pacific Railroad from this Coast to sea-ports on the Gulf of Mexico open a competing line for the transportation of wheat to the great markets of Europe, as is promised, and to a certain extent expected, Stockton will occupy a still more favorable position for the transaction of business than she has heretofore done. She will have the advantage of a terminal station for exportation, and also one nearest to the Eastern terminus of the road upon the Gulf of Mexico. Cars loaded with wheat at the warehouses of Stockton would be shipped to New Orleans, or other Eastern markets, at minimum prices, and there is good reason for believing that eventually a considerable portion of the wheat produced in this region of country will find a market either in its normal state or as flour manufactured at the Stockton mills, in the market that must be established at New Orleans, or some other point accessible upon the Gulf of Mexico, from which wheat and flour will be furnished to supply the bread-purchasing States of the southern portion of the Union and Europe.

The total receipts in Stockton of the crop of 1892 were 100,732 tons. The crop was not as large in 1892 as it has been in previous years, and the competition among dealers and warehousemen was greater than ever before. Stockton, however, received her full proportion of the business. The prices have also been more satisfactory to the producer than in some former years, and more has consequently been sold.

The principal dealers in grain at the present time are J. D. Peters, Stewart & Smith, I. S. Postwick Geo. Hart, H. E. Wright, Sperry & Co., R. B. Lane, the Stockton Milling Co., the Farmers' Co-operative Union, and the Stockton Warehouse.

#### The Lumber Trade.

The lumber trade in the agricultural portions of the San Joaquin valley is great, and although there are fine forests of pine, fir, spruce, cedar, etc., in the Sierra Nevada range bordering the valley upon the east, facilities for transporting lumber from the mountain regions to the valley have not yet been provided, and consequently the larger portion of the supply for the valley towns is brought to Stockton by water from the northern coast counties of California, and from Puget Sound. The average sales of lumber in this city run from 25,000,000 to 35,000,000 feet per annum, it being shipped from this city by rail to all portions of the valley. The total lumber trade will amount to over \$500,000 per annum. A number of sailing vessels and barges are constantly employed in bringing lumber to this city from San Francisco.

Two firms, Simpson & Gray and Munre & Smith, are engaged in the business, and both have large yards and carry extensive stocks of all kinds of lumber necessary to supply the extensive trade.

#### Fruit, Vegetables and Farm Produce.

While there is much land in the vicinity of Stockton well adapted to the production of fruit,

less attention is paid to that industry than in some other portions of the State. The market for fruit has been precarious, and only since the establishment of canneries for working up the surplus product of the orchards has there been any special encouragement for the farmer to devote to fruit raising land which would be profitable if cultivated in wheat. Large quantities of fruit are, however, received here, and considerable export to San Francisco. The shipments of various kinds of fruits from Stockton to that market, for 1892, aggregated about 800 tons, valued at \$30,000. Shipments were also made of choice pears, apricots and table grapes to Eastern markets.

Large quantities of vegetables are raised in the vicinity of Stockton, upon the reclaimed tule lands bordering the San Joaquin river, and over 7,000 tons of the products of the gardens in these localities were, last year, shipped to supply the San Francisco market.

This trade has increased very rapidly during the last few years, and as the population of the State increases and the demand for products of the soil of this character is increased, the area of land brought under a system of thorough cultivation in this locality will be greatly enlarged. It is already apparent that land adapted to the production of fruit, grapes, vegetables, etc., can be much better employed than in the culture of cereal crops, and consequently the large tracts now used almost exclusively for wheat will soon be devoted to other purposes which will afford employment to a large number of persons and yield profits in proportion to the labor bestowed, as certainly as it does as now cultivated and managed. The leading dealers in fruit, vegetables and farm products are C. V. Thompson, B. H. Brown, V. Galgiani and Elliott & Brighle,

and the clerks all busy. While we were at San Jose, the citizens and capitalists were devising ways and means of establishing various manufacturing enterprises in their midst, and we saw Mr. M. Hale, the latter, one of the most active men in the enterprise. Mr. Hale is a native of the State of Vermont. O. A. and J. M., the two older brothers, were born in New York, and the younger brothers in the State of Michigan. Their trade this year will aggregate half a million dollars.

#### Edward McKenna

Has been in this business in this city for many years, and has a large, commodious, and well-arranged store, with entrances upon both Main and Hunter streets. His building is two stories in height, and both floors are occupied. W. J. Behling, Geo. Chalmers, and Alex. Chalmers, besides several others, have fine stores, and carry large stocks of merchandise in their line.

Rosenbaum & Crawford, leading dealers in genteel clothing and furnishing goods, carry a very large stock, and have secured an extensive trade throughout the whole region of country tributary to Stockton; there are several other houses doing a large business in this same line.

The aggregate sales of the dealers in dry goods, clothing, carpets, etc., in this city, will amount to \$550,000 annually.

#### Groceries and Provisions.

Although there are no houses in this city engaged in an exclusive jobbing trade in groceries and provisions, there are several houses which have an extensive trade with interior dealers who are here supplied upon as favorable terms as they could obtain from San Francisco jobbers. There are numerous dealers in this line of goods, of which the

Patent Oil, Glass, Wall Paper, Etc. There are two firms who make dealings in the above mentioned goods a specialty. Badger Bros. also keep a large stock of paper hangings, etc.

Seidolph & Travis, agents for the Continental Oil Company, have during the last season, erected a large building, and deal extensively in kerosene and other kinds of oils. Their establishment is the depot for supplies for the surrounding country, and they ship large quantities by rail to the various towns of the San Joaquin valley.

#### Banking.

Stockton has always been a profitable point for the use of money. The development of the varied resources of the San Joaquin valley has not been carried out to the extent thus far attained without the use of large amounts of capital, and consequently the business of banking and loaning of money has been profitable.

At present there are five banks in Stockton with an aggregate capital of \$1,132,150 and assets amounting to \$4,371,866.13. As we published an official bank directory, containing all the banking houses in the State, in the January number of THE RESOURCES (which will be corrected every month), giving full detailed accounts of all the banks in the State, we refer our readers to said directory.

#### Stockton Business College.

Which was established several years ago, has earned a reputation unparalleled by any college on the Coast. Here is taught a full business course, just what any young man or young lady must have, if they want to succeed in business. Professor F. R. Clark, the Principal, deserves credit for the way he has built up the reputation of this place of learning. The Stockton Business College Journal is published by this gentleman. The Journal will be sent on application, and gives all desired information in regard to how to get a good, business education, at a small cost.

The Academy of St. Agnes, under the direction of the Dominican Sisters, is an old established school, and is well patronized from the different parts of the State.

#### Newspapers.

Stockton has three daily newspapers, the Independent, a morning paper, with a semi-weekly edition; the Herald, a morning paper, with a weekly edition; the Mail, an evening paper, with a weekly edition.

The Independent is the oldest paper published in the city, having been established in 1861. It is Republican in politics, and has a general circulation throughout the city and surrounding country. Brooks & Phelps are its present publishers.

The Herald, until lately issued as an evening paper, was established in 1881 and is now, and generally has been, the advocate of Democratic principles. In change to a morning paper has increased its circulation and sphere of usefulness. The Herald is published by Preston & Rogate.

The Mail was established in 1880, and received a liberal patronage from the commencement of its career. It is independent in politics. Its publishers are Colonel Cosgrove and Ninnan.

All these journals give their readers full reports of current events, and are generally circulated throughout the San Joaquin valley.

#### Art Galleries.

Stockton has some of the finest art and photograph galleries of any place on the Pacific Coast. J. Pitcher Spooner, the leading artist, has taken a great interest in showing Stockton to the world, he has kindly donated \$300 worth of photographing materials securing our bird's eye of the city, and to Mr. Spooner belongs the credit of securing the illustration.

Mr. B. P. Batchelder, another of Stockton's first class artists, has the reputation of doing fine work. There are a few others, of the profession, in the city.

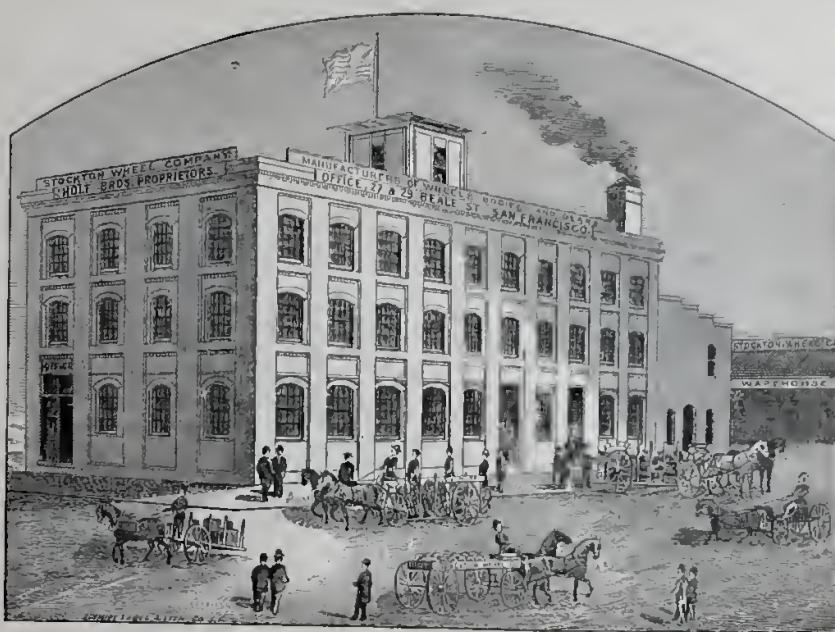
#### Recapitulation.

Besides the various lines of business heretofore mentioned which are carried on in this city, there are firms who deal especially in articles not enumerated above. Messrs. Hart & Thrift and Hammond, Munre & Yantley, besides their trade in groceries, deal extensively in lime, plaster, etc.

Brick, to supply the demands of the city and surrounding country, are manufactured in this vicinity, and large quantities are also shipped from the brickyards of this county to San Francisco.

One firm has an extensive trade in hard-wood lumber, wagon and carriage material, while there are several firms doing an extensive trade in supplying the city and surrounding country with iron wares. Two firms, L. Gerbich & Co., and Green & Greenwood, slaughter twenty teams and fifty sheep per day.

An extensive business is also done in this city in the purchase of poultry and eggs for shipment to the San Francisco market. Peter Munre, an extensive dealer in groceries, is a leading dealer in the above-mentioned articles, and makes shipments to San Francisco almost daily.



HOLT BROS. WHEEL FACTORY, STOCKTON, CAL.

#### Commercial Houses.

Commercially, Stockton is well supplied with dry goods, clothing, hardware, grocery, jewelry and, in fact, all classes of stores. There are, perhaps, more goods sold in the City of Stockton than any city in the State, outside of San Francisco. And, by referring to the different commercial agencies, we find less failures reported than at any place on the coast; thus showing the healthy state of finances of this valley. Owing to the superior facilities afforded customers to choose from the large and complete assortment of goods kept on hand, the trade, in all its different branches, extends throughout the surrounding country for their interest to obtain all their supplies from here. Among the leading houses, in the various branches, we mention the following:

#### Rule Brothers & Co.

Consist of five brothers and a father. They own five stores, all in Central California, located at Sacramento, Stockton, Salinas City, San Jose, and Petaluma. Their first store was established in San Jose, in 1876, and the other four in '78-'9. Having personally visited all of their stores, and having a thorough knowledge of the mercantile business, we became acquainted with several members of the firm. They buy and sell directly for cash. One or two of the brothers are East, and do the buying. Their goods are bought directly from the manufacturers, thus saving the jobbers' commissions. They buy for cash, and cash in California means 30 days. They pay down, thus saving from five to ten per cent. Then, they have such an extensive country to supply that they usually take the entire lot of a certain line of goods, making another discount. Anyone visiting either of their stores will see all new goods, the one price marked in plain figures,

most prominent are Southworth & Grattan, Hedges & Buck, Hammond, Moore and Yardley, R. B. Parker & Son, L. Hansel, H. O. Boisacher, and Chesnut & Moore. The aggregate sales of the various houses will aggregate \$1,235,000 annually.

#### Hardware, Iron, Etc.

Anstin Bros., recently built a fine brick building (100x148 ft.) at the corner of Main and American streets, where they have the largest stock of hardware, iron, steel, etc., in the valley.

J. F. Omitt & Co. have a similar establishment, and are having an extensive trade in the Oliver Chilled Plow and other agricultural implements, and hardware of all kinds.

W. A. Dorr, agent for Hawley Bros., has an agricultural warehouse, where all the different kinds of farming implements are sold.

John Jackson, on Main street, keeps a large stock of all classes of hardware, Jackson's patent pumps, gas, water and steam fittings.

The West Lake Stove Company have the largest stock of stoves, tin, copper and sheet iron, etc., in the city.

F. A. Ruhl, on Hunter street, deals extensively in Ruhl's patent lift pumps, stoves, tin and copper ware, pipe, etc.

Baily, Badgley & Co., importers of agricultural implements, builders and carpenters' tools, are doing an extensive business in their line.

#### Drugs, Medicines, Etc.

There are seven drug stores in the city, some of which are expensively and elegantly fitted up and arranged.

H. H. Munre & Son, a leading firm, are manufacturers of proprietary articles, which business is conducted in connection with their regular trade in drugs. I. B. Munre, J. H. Williams, W. M. Hickman and Wm. M. McCurdy, each have drug stores and have a good trade.



Two firms are engaged in supplying the people of the city with ice, which is obtained from the Sierras, and sold at very reasonable rates.

The aggregate business of the city for the year 1882, exclusive of banking, insurance, real estate, etc., will exceed \$13,000,000.

The total trade of Stockton for 1882, in the various branches of business, here conducted, was about as follows:

Wheat.....	\$3,500,000
Wool.....	175,000
Hops.....	150,000
Hides.....	40,000
Groceries.....	1,225,000
Agricultural Implements.....	475,000
Liquors.....	150,000
Fruit and Vegetables.....	250,000
Hay, Durr Products, etc.....	150,000
Boots and Shoes.....	75,000
Jewelry.....	50,000
Lumber.....	600,000
Hard-wood lumber, etc.....	75,000
Dry goods and Clothing.....	550,000
Drugs and Medicines.....	50,000
Books, Stationery, etc.....	50,000
Wood and Coal.....	120,000
Stoves and House Furnishing goods.....	200,000
Crockery and Glassware.....	75,000
Paints, Oil, etc.....	200,000
Furniture, Bedding, etc.....	150,000
Millinery Goods.....	50,000
Tobacco, Cigars, etc.....	100,000
Variety Stores.....	100,000
Lime, Cement, etc.....	50,000
Fresh Meats.....	325,000
Poultry, Eggs, etc.....	100,000

#### Real Estate

In San Joaquin county is rapidly advancing in price. Having visited this place for several years in succession, we see a marked change. There is a number of reliable real estate dealers in Stockton who gave us their opinions in regard to the lands of this county. We will name the following gentlemen, who may be relied upon: John Tully, Alonzo Rhoda, James M. McCarthy, James E. Morrissey, E. C. Arnold, and R. E. Wilhoit, a searcher of records. A number of these gentlemen buy and sell farming lands. They estimate the price of land fully ten per cent. higher than it was one year ago, ranging in price from \$25 to \$50 per acre, according to location and improvements.

#### City Lots.

The price of city lots has materially advanced during the last three years, and now range from \$150 in the outer limits of the city to \$1,000 in the more central locations. L. M. Cutting, agent for the Weber estate, and also general dealer in real estate, has, during the last two years, done an extensive business in the sale of city property, and in that time many vacant lots have been purchased and improved by the erection of fine buildings thereon.

#### Hotels.

Stockton is amply supplied with hotel accommodations. The Yo Semite, kept by James Covin, is the first-class house.

The Commercial, the popular hotel of Stockton, is considered the best second-class house on the coast. It is kept by A. J. & J. E. Hahn, and is located on Main and California streets, in the business center of the city.

The Central is kept by John Henderson. All these houses run buses to all trains and boats.

Besides the above there are a number of less pretentious hotels, such as the San Joaquin, opposite Court House, kept by F. Stoetzer, the What Cheer, the United States, and several others. There are several first-class restaurants and numerous boarding and lodging houses, where good accommodations can be obtained at reasonable rates.

#### New Buildings.

During the year 1882 100 dwellings were erected in the city limits, ranging in cost from \$800 to \$8,000. Most of these houses were erected by persons who intend to occupy them and make this city their permanent residence, and the larger portion cost from \$1,500 to \$2,000. During the year several large buildings for business purposes were erected, and the aggregate cost of all the new buildings and improvements completed during the past year will exceed \$600,000.

Several large buildings are projected for 1883, and numerous dwellings are to be constructed, and the prospect is good that the improvements in this direction will be as great for 1883 as for the previous year.

#### Population.

Stockton had a population of 10,237 in 1880, as shown by the U. S. census. The enumeration was, however, made at the season when a large number of the usual residents were attending to mining and agricultural pursuits in the surrounding country. A rapid growth has been made here during the last two years, and the total population for the winter months is estimated at about 15,000 within the corporate limits, while the county immediately adjacent to this city is becoming thickly populated, and on its southerly boundary, especially, the land has been laid out in blocks, in conformity with the city survey, and a good many dwellings have been erected thereon during the last three years.

#### The Probable Future of Stockton.

From the facts heretofore given, it will be apparent, even by the casual reader, that Stockton is at present a prosperous and growing city, and that its future prospects are promising, as is shown by the almost unlimited resources of the immense area of country which surrounds it, of which the city is

naturally the business center. The next largest town in the county is the village of

#### Lodi.

Which lies twelve miles north from Stockton. This place has sprung into existence since the construction of the Central Pacific Railroad, and it is now a beautiful village of 1,000 inhabitants. Its citizens have exhibited a degree of enterprise quite surprising, to make it the busiest village of the interior. Lodi built 25 new buildings in 1882, all of a much better class than those built heretofore. Green Brothers, merchants, have built a fine brick store and three new residences. A fine brick flouring mill was built in 1876, with five run of stone, which is one of the main features of the town. Lodi is situated in one of the finest wheat sections in the State, at the junction of the Central Pacific and the San Joaquin & Sierra (Narrow-Gauge) Railroads. The town is beautifully situated on either side

lake freight from here to San Francisco. This is one of the oldest places in the county. It contains a number of fine buildings and a flouring mill. A fine brick Masonic building (built by N. A. Comstock, of Lodi), has recently been completed. E. H. Plummer keeps the Plummer House, the only hotel in the town. There are several extensive carriage and wagon shops. Dr. H. Bentley has an extensive store of general merchandise, Rutledge & McLarran also have quite a large stock of goods, such as are usually kept in a country store. In this vicinity is excellent farming land, held at comparatively high prices.

Eight miles northeast from Lodi, up on the high banks of the Mokelumne river, on the line of the S. J. & S. R. R., brings us to the village of

#### Lockford.

Which lies in the center of a fine farming community. Lockford is more thriving now than for

refreshments. This house changed hands, about one year ago, and is now kept by Stackpole & Lincoln, who keep the best eating house on the road. The town contains about 300 people, who are all directly and indirectly connected with the railroad. About fifteen miles southeast of Lathrop we come to the village of

#### Tracy.

This place is some eight miles from the Alameda county line, and is the junction of the Central and San Pablo and Tulare division of the Southern Pacific Railroad, 82 miles distant from San Francisco, via the new road, and 71 via Livermore.

The town contains about 100 people, and has two hotels: The San Joaquin, kept by C. Ludwig, and the Tracy House, presided over by E. Wasmolb. The town has two general stores. Land in the vicinity is of a light soil, and is valued at from \$5 to \$10 per acre. Very little rain falls in this vicinity, for some reason, and no water can be had for irrigation, unless at great expense.

The other towns of the county are: New Hope, which contains about 50 inhabitants; French Camp, 75; Atlanta, 50; Acampo, 75 to 100; Bantas, 100; Bellota, 50; Collegoville, 50; Elliott, 50; Peters, 40.

#### MINING PROSPECTS.

Never in the history of our county have the mining prospects been so bright as they are to-day. Hundreds of new locations have been made during the past year, and hundreds more will be made in the future. The quartz interest is in its infancy, and we believe the day is not far distant when we shall see a great many mines in this vicinity which will equal the celebrated Providence, Merrifield, Wyoming, Nevada City and other large mines which are now paying handsome dividends to their owners. The outlook in the adjoining district is equally good as is evidenced by the preparations that are being made. The Tidings in speaking of this subject says: There is the expectation that there will be more activity in quartz mining in this district the coming summer than there was reason to expect a few months ago. Some of the prospecting mines which have suspended during the winter months will resume operations; while there are rumors, for which there is some basis, of one or more old mines starting up. There are also several bonding operations of good properties being in course of negotiation with a view of putting them into new and stronger hands, so it may be said that there is no idleness or indifference as to the opening or development of the quartz resources of the district. There is no field in all California that offers more encouragement for legitimate quartz mining than this. This character of mining has been a successful business here for more than 30 years, during which time many millions of dollars have been extracted, and yet there are many veins that are not fairly prospected on the surface, and a number of properties that have only been superficially worked—to the depth of one to 300 feet. There is wealth in the quartz veins of the district that justifies the outlay of a large capital and the effort and labor of enterprising men. Although much work has been done in the way of explorations it is merely the beginning of what is yet to be accomplished in this old and reliable gold-bearing region.—Nevada Transcript.

#### A PREDICTION FOR SAN FRANCISCO.

Peter Cooper, the eminent New York philanthropist and talliometer, and owner of the Cooper Institute, who died Wednesday morning, April 4th, took a deep interest in California. Though he had never visited San Francisco he could name all our principal street and buildings. Mr. Cooper was a far-seeing man of excellent judgment, and he often remarked that San Francisco would, in time, be one of the greatest cities in the world. Two years ago, Mr. Cooper was introduced to Congressman J. K. Luttrell, of this State, in the office of his son-in-law, A. S. Hewitt. He said to Luttrell: "There is going to be another great city in this country. New York is getting so large and heavy that there will have to be another such city on the other side of the continent to balance it to keep it from tipping up," said Mr. Cooper laughingly. "And I tell you, young man, San Francisco is going to be that great city. It has the harbor and a great rich country north and south of it. I can remember when New York had but 27,000. I have lived to see it grow to 27 times 27,000, and you will see in a few years all of San Francisco built up just extending its blocks of houses into the adjacent country. You will also see another large population settled across its bay equivalent to our Brooklyn. I tell you, sir, the two great cities of America will be New York and San Francisco."



NEW MASONIC TEMPLE, Stockton, California.

of the railroad, and it is laid out with wide streets, many of them handsomely shaded. The soil in this vicinity is a fine, sandy loam, well adapted for trees.

Land in the vicinity of Lodi could be bought in 1870 at from six to ten dollars per acre, and to-day it brings from \$75 to \$90 per acre. Lodi has no poor country around it.

The Weekly Valley Review, established some five years ago is published every Tuesday by Gertrude Force Cluff. The other is the Lodi Sentinel, which is issued every Saturday by Ellis & McQuaid. It was established last year, and now has a wide circulation in this part of the valley.

many years past. It contains a population of 450. There are two general stores, and several carriage and wagon shops.

R. L. Patton has recently built and furnished a fine, new, two-story hotel, the Live Oak. Another new hotel is kept by R. Coon.

Land in this vicinity is valued at from \$30 to \$50 per acre.

Twelve miles east of Stockton we come to the village of

#### Linden.

Which is surrounded by the richest farming lands in the county. This section is beautified by scat-



COMMERCIAL HOTEL, STOCKTON, CAL.

N. A. Comstock, an architect and builder, erected a number of new buildings in and around Lodi within the past year, many of which are fine farm residences, which is sufficient evidence of the prosperity of the place.

T. A. Wilson keeps the Sargent House, a first-class hotel, immediately opposite the railroad depot. The Orangers' Business Association of Lodi has a large stock of general merchandise.

C. O. Ivory and Green Brothers are the leading merchants in the place.

T. Stoddard has a full supply of lumber and all classes of building material constantly on hand.

Two and one-half miles northwest from Lodi is the third town in the county, that of

#### Woodbridge.

Beautifully situated on the banks of the Mokelumne river, and on the line of the S. J. & S. R. R. The river is navigable to within three miles of the place. At the terminus of the narrow-gauge railroad boats

load oak trees, giving the landscape the appearance of an old English park. The town contains about 150 inhabitants. The surrounding country is considered the finest wheat-producing section in the county. Land is valued at from \$50 to \$80 per acre.

Sixteen miles from Stockton, on the line of the Stockton and Copperopolis Railroad, brings us to the village of

#### Faradogton.

Which is surrounded by a rich farming country. The farmers in the vicinity are nearly all engaged in raising wheat. The town contains about 200 people, has two general stores, a good school, and is a large grain shipping point. Ten miles south from Stockton brings us to

#### Lathrop.

The junction of the Central and Southern Pacific Railroads. It contains a splendid hotel, where all trains stop, allowing the passengers 25 minutes for



## HUMBOLDT COUNTY'S ADVANCEMENT.

We have received the annual report of the Chamber of Commerce of Eureka, Humboldt county, by its President and Secretary. It contains much valuable information concerning the resources and developments of that rapidly-growing section of the State. It is shown that the exports of its lumber, during 1882, reached a value of something over \$2,000,000. We quote, as follows, from the report:

The time has gone by when our foremost interest must depend on the primitive method of the past to supply the stock on which our mills are to be kept running. The "snaking" process, with the stag team and the truck and tramway, or the uncertain floods of winter, can neither singly or altogether afford the needed facilities of transport from the heart of our forests to the water.

Lines of railroad diverging from the bay and reaching their limit by the cheap and easy grades of our principal valleys to the remotest parts of the county, is a magnificent scheme of internal improvement for us. While it would give to the mill and timber interests guarantees of almost unlimited development, it would in a corresponding degree give a vigorous push to every other form of production. The system of improvements referred to is evolved from enterprises quite distinct in their organization, each of which must rely for maintenance on the advantages of route it may respectively occupy.

Embracing the different lines within the county, we begin at the north, in their order, with the Trinidad Mill Co.'s railroad from the port of Trinidad to Big Lagoon, ten miles in length. Some four miles of this road is completed and in running order, the balance will be completed during this year. Next the Vance railroad, ten miles in length, crossing Mad river four miles from the mouth, and in the direction it is a penetrating and unsurpassed for the scope and quality of forest treasures it must bring to its support. The extension of the Arcata Transportation Company's railroad gives it a present length of about eight miles, with a proposed terminus some two miles up the south side of the same stream, the whole of which will be completed before the close of the present year. After the Arcata we come to the late enterprise of Flannigan, Brosnan & Co., a short line on the east of the upper bay, and the Carson road of about the same extent; and lastly on the bay to the north of Eureka, the Freshwater railroad of D. R. Jones & Co., seven miles in length, and yearly being extended. These are all constructed by private parties, with the most substantial of roadbeds, iron T rails, thoroughly equipped and operated by first class locomotives. Like those just mentioned, the Elk river railroad (projected by an incorporated company) has special reference to the opening up of a vast body of redwood situated on and adjacent to its route. This will terminate at the old site of Buckshot and be of a length of eight miles. The company has done the preliminary work for grading and construction the ensuing summer. But, perhaps, the most important of all, as affecting the material interest of our people, the transportation of merchandise and farm products, are the two railroads lately projected from the bay by the way of Eel river valley toward the southern and southeastern portions of the county. Both franchises are incorporated and known under the respective names of the Eel River & Eureka R. R. Co., and the Humboldt Bay & Eel River Co. The former extends from Eureka forty-five miles, following in part Eel river valley, and terminates on the Van Duzen fork. The latter, starting from Southport on the south bay, follows the same valley twenty-five miles, with a present terminus fixed at Eagle Prairie. Work on each of these enterprises is actively prosecuted, and in the early spring a large force of laborers will be required, with a view to carry them to a speedy completion.

Sheep husbandry continues to hold pre-eminent rank among our local industries. With the favorable conditions found in our equable climate and the unimpaired pasturage of our grass-land hills, there is little likelihood of a shortage of its staple product for years to come, while present average prices are maintained, but on the contrary must reach largely increased proportions.

It will be noticed in the exhibit of our exports that field crops have fallen below the amount of former years. The past season was one of unusual yield, when compared with the acreage devoted to cereals, but our farmers, and we think wisely, are making a departure from old methods by the adoption of a system of mixed husbandry—supplementing the products of tillage with those of grazing and the dairy. We believe, however, that facts will bear out the statement, that while the season was uncommonly propitious and the crops were abundantly promising, too many of our farmers were tardy at the harvest. Tens of thousands would not cover the loss occasioned by the first of October rains. A much greater breadth was sown to grain than usual, of which, perhaps a thousand acres, after being fully ripe were damaged or entirely destroyed.

If any one thing more than another can be a source of pride and consolation to its citizens it is a reflection that there are so many untended and

inviting fields of industry in reserve for the future, in addition to those by which they have reached their present enviable position.

## GIVE THE LAND A REST.

While the majority of people are fearful lest the coming harvest should be lighter than usual, there is one man in Yolo county who thinks it would be well for the State in the end, if such should be the case. He tells the Woodland Mail that unproductive seasons have been nothing short of blessings to farmers, because they allowed the land to rest. The Mail thinks there is much truth in the remark and adds:

"Under the old Mosaic law, promulgated to the children of Israel, this was provided for by ordaining one year in seven the year of Jubilee. During that year they were not to gather the fruits that grew spontaneously. It was termed 'a year of rest for the land.' Their climate was similar to ours, having its rainy and its dry portion of the year. The amount of their rain was indicative of the coming harvest. In Egypt to-day the estimates of a greater or less bountiful return from the soil is predicated upon the overflow of the Nile. Without any theological speculation on this law, as promulgated by a divine revelation or inspiration, or advanced men of superior wisdom, the necessity for it is plainly manifest. We summer-fallow our lands for the same reason. A year's rest seems to restore the exhausted soil to its original vigor. The dry years are nature's summer-fallowing. Many of our farmers would get from the land all they could each year, and would finally exhaust the soil, as has been done on many of the old tobacco plantations of Virginia, until the land had become bankrupt of all its producing qualities. A constant succession of one kind of crop, no matter what that may be, will eventually deprive any soil of the elements necessary to its growth. The farmers upon our prairies have learned that by experience, and our California agriculturalists will yet be compelled to put back upon these soils something in return for their generous contributions. When all these matters are overlooked or neglected, we shall still find nature coming to the relief of the impoverished soil, by giving us an occasional dry year—a rest for the land—a modern year of Jubilee."

It cannot be denied that there is some truth in the above. For 30 years past the land in the wheat growing districts of this State has been subjected to almost yearly sowing, and thus continued cultivation must, of necessity, exhaust its vitality. In early days the soil in the valleys was wonderfully productive. As far back as 28 years ago, when the farmers were obliged to resort to somewhat primitive methods of harvesting their crops, we knew a third volunteer crop of oats to yield 75 bushels to the acre. It was threshed on the ground by being tramped under the feet of horses, and, of course, much of the grain was lost. This land was afterwards ploughed and sown regularly every year, for fifteen years, and, at the end of that time, it was only under the most favorable conditions that it would yield 30 or 40 bushels of wheat to the acre. If the same unwise system of farming has since been followed up, it is more than probable that 20 bushels is now deemed a good crop on this same land. Until comparatively a few years past, farming—like every other industry in California—was conducted in the loosest manner. Farming on shares was largely engaged in. A stranger would come along in the early fall, and bargain with the shiftless owner of a farm to "put in a crop on shares." He would invariably make a few thousand dollars, and then strike out for the mines or "the States," and another would take his place the following year. The land was then so rich and productive that nobody thought it would ever fail to raise an abundant crop—if, indeed, any thought was given to the subject at all—and so the loose system was continued. There should be a rotation of crops, or else land that has been cultivated for a few years successively should be allowed to rest one or two seasons at a time. If farmers will persist in ignoring this fact, perhaps it is well, as the Yolo Mail intimates, that an unproductive season comes once in a while, to enforce a year's rest for the overtaxed land.—Sacramento Bee.

## THE SHEEP RAISERS.

A writer in the Rural Press, of recent date, furnishes that paper with an interesting article on "Sheep Husbandry," from which we clip the following paragraph:

Sheep matters are now of special interest, because of the continued demand for California sheep to cover the pastures of the great central States and Territories, where wool growing is now extending rapidly. The construction of our ranges by the continual increase of cultivated areas is compelling sheep-growers to change their methods, and the demand for outside regions has given a good market for the surplus, which would have, perhaps, become burdensome without it. It has also allowed a continuance of breeding which otherwise would probably have been curtailed.

## MOUNTAIN BEAUTY.

One of the special features of beauty in Los Angeles scenery, and in Southern California, is the peculiar beauty of our mountain scenes. But little has ever been said about the scenery in this part of the country, except its seashore and orange groves and vineyards.

A view from Los Angeles observes the northern horizon bounded by the grand old Sierra Madre mountains, about twelve miles distant. There are many ways of enjoying the delights of this mountain scenery. During the spring, summer, and autumn, camps may be established at the mouth of canyons, with streams of pure water. The shady retreats of the canyon in the daytime afford lovely places for fishing, bathing, and sunbathing, with a ravenous appetite, while the open country, out of the canyon, affords a dry, warm place for the camp at night.

There is beauty all abroad. The open plain and the distant ocean are exposed to view, while within the canyon, the deep recesses in the rocks, shaded by bay-tree and alders, afford food for profound contemplation. At a sweep of vision you behold the lofty summits, where the moss-clad pines and cedars wave, where thunders sleep and lightnings come to play. On downward, the eye takes in all the rocky elements of the range, from tertiary, miocene, pliocene, secondary and silurian, down to the primitive strata of rock at the base, furrowed out millions of years ago, in the then plastic stone, by sulphurous streams, while the young earth was floating in seething mists and darkness, before sun or moon had illumined its surface, while lightnings and earthquakes raged in the heated, misty mass of cosmic matter gathered into form from the great seed-bed of worlds pervading the starry firmament. Here is the anatomy of the planet disclosed in great, grand majesty.

Another, and more beautiful way of enjoying the beauty of our lovely mountains is to climb, by easy journeys, to the top of the range, into the majestic forests that crown the lofty heights. As the ascent is made, every step is a new pleasure, revealing every moment some new view and increased scope of vision. The trails are winding and romantic, but the labor of ascending is full of reward. There is an exaltation of mind and feeling when the visitor stands upon the crested headlands above San Gabriel, and takes in the wonderful view that opens around.

Out on the ocean the spreading sails of commerce seem to connect sea and sky, while the smoke of the steamship hangs in festoons in the air. The valley of San Gabriel is almost under the feet. Every house and orchard and vineyard and village and reservoir is plainly revealed, while the goodly city of Los Angeles seems close at hand, with all its features clearly marked out and notably distinct. Santa Monica, Wilmington, Anaheim, Santa Ana, and Orange, though more distant, are plainly seen, and a full view is obtained of the great grain fields of San Fernando.

All the industries of the land are before the eye. The ships, and other vessels at Wilmington, are all in view. The flying trains are hurrying to and fro, bringing in the merchandise of the East and of Mexico, and carrying away the rich products of the Pacific Coast in every direction.

It is a scene for a painter, a poet, or a historian, rare and rewarding. The brave band that first opened this track to this airy height among the summer clouds, now lies at rest in the little churchyard below, and in view of the delighted traveler, and all who climb to this mount of vision will bless the name of Benjamin Davis Wilson for this grand view which his hand wrought out long years ago, by which the ascent of our noble mountains is easily attained.

The summer climate on our mountain tops, among the noble trees that shade springs of coldest water, is one of rapture. The delicate air is perfumed with odors of trees and flowers, and is of crystal clearness. We need no distant trip and expensive journey to find a land of Beulah. It is at home in our own matchless mountains that have been neglected too long and too much by our people. In the near future they will be the resort of all who love rugged rocks, dashing waterfalls, bold precipices, forests, and flowers, and various of beauty that make mankind wiser and better. Surely there ought to be enough of adventure and enterprise to open a boarding house in the old log palace on the mountains, or build other such houses in rustic style, and invite the people to go up and "look at nature in her loveliest moods."

Too long has this most lovely place been neglected. With the coming summer may this neglect be removed, and our exalted land of beauty be occupied with intelligent visitors and lovers of the finest scenery in our country.—Los Angeles Express.

## BEGIN A VEGETABLE GARDEN.

Every farmer and every housekeeper who has a spot of land large enough should embrace this favorable weather to make a beginning for a vegetable garden. Lettuce, onions, carrots, beets, parsnips, cabbage, turnips, and radishes, may all be planted now, with a certainty that they will grow well, and produce a good variety of fresh, home-raised vegetables for the table.—Yolo Mail.

## WHITE EGYPTIAN CORN.

This is a most valuable grain plant ever introduced into our State. Mr. Scuttergood at Bald Mountain has successfully tested this wonderful corn, and informs us that it grows luxuriantly on the dryest places and without a particle of irrigating. There are several varieties of it, but the best is the solid headed, introduced by Prof. Sanders, from the interior of China many years ago. It will make a crop on poorer land, and with less moisture than any other grain. It is more valuable pound for pound than barley or Indian corn for feed for horses, while for hogs and fowl nothing of the grain kind equals it. By care and high culture, there was raised at the rate of nine tons of grain per acre. Seven crops of heads were cut, extending over a period of six months of harvesting, or a crop every 30 days from the cutting of the first crop. One year, says the writer, I did even better than this: On the 15th of June my ditch broke and wet a piece of land. I plowed it as soon as it was dry enough, dropping Egyptian corn every third furrow. It never had either care, water or culture, and 117 days from the day of planting, viz.: October 21st, we gathered the crop, 60 bushels or 3,600 pounds of the most beautiful grain that I ever saw, per acre.

The advantages of raising this grain are: 1—It will give a big yield on soil too poor to produce any other grain crop. 2—It will grow in ground too dry to produce even rye or barley, the two next dryest crops. 3—It requires no threshing; just cutting off the heads being all that is necessary, and that is less work than to husk other corn. 4—It can be harvested any time from August till Christmas, being ready at any time that you are ready to harvest. 5—Its yield is greater, and it is more valuable stock or team feed, pound for pound, than any other grain. 6—It is one of the most healthful and palatable articles of food ever brought to the table, either ground and made into bread, cakes, puddings, etc., or cooked whole as a substitute for rice. 7—It leaves on the ground, when summer feed is gone, immense quantities of green stalks, leaves and heads, which are greedily eaten and are of the greatest value for fall pasture of all kinds of live stock.—Tuolumne Independent.

**PACIFIC**  
Business College,  
320 POST ST.  
SAN FRANCISCO.

OPPOSITE UNION SQUARE

THE LEADING

Commercial School

ON THE COAST.

LIFE SCHOLARSHIPS

—FOR—

Business Course. Only \$70.

NO VACATIONS.

Day and Evening Sessions.

Qualities Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Healthful Location.  
Ladies Admitted.

Special Inducements Offered to Persons of Neglected Education.

Business Course.  
Accounting Course.  
Combined Course.  
Penmanship Course.  
Modern Languages.  
Phonographic Course.  
Special Privileges.

For Further Information call at the College Office

No. 320 POST ST.

Or Address the Proprietors.

CHAMBERLAIN & ROBINSON.



## THE FOOT-HILLS OF THE SIERRA.

## The Crowning Glory of the Golden State.

[Written for THE RESOURCES OF CALIFORNIA, by James C. Kemp.]

California has a distinctive individuality, (if the term can be properly applied), that renders her, in many essential respects, the direct opposite of all the other States which, in the aggregate, form the American Union. It follows, that the immigrant once having sailed inwardly through the Golden Gate, passed the boundary line of Oregon, crossed the snowy summit of the Sierra, or entered the State southwardly, by way of the Colorado desert, must expect and prepare to commence life again, upon an entirely new basis, throwing away the traditional methods, manners, and customs of his ancestors, as well as precedents of every other description, literally, minutely, and unhesitatingly, to the winds.

This is one great, vital principle that, first of all, must be completely digested, and then strictly adhered to; non-compliance with it having proved a stumbling-block to thousands upon thousands in the past, who, with the most stubborn tenacity, insisted on viewing and judging of the resources, characteristics, and capabilities of California, through the medium of Eastern or foreign eye-glasses.

The foot-hills of the Sierra embrace the locality in which all our placer mines are situated, and which has already yielded fully a billion and a half of virgin gold.

It was to this region that the miners of '49 made their way, not one of whom, nor of the immigration of several succeeding years, supposed the soil of any account for agricultural purposes, it being couched by all parties that, after the mines were exhausted, the whole section would naturally revert to the possession of the Digger Indians, grizzly bear, jackass rabbit, and coyote.

The writer arrived here in September, 1849, and a few weeks later commenced operations at Dry Creek, (now called Drytown), Amador county, residing there for a period of ten years, during which he had ample opportunity to learn and judge practically of the merits of this great region, which is situated on the western side of the Sierra, extending the whole length of the State, a distance of 750 miles one way, and 40 the other, embracing a total area of 30,000 square miles; three-fifths the size of England, which has a population of 23,500,000.

Taken all in all, a more beautiful locality cannot be found, and it is certainly destined to become the delightful home of several millions of happy and prosperous people.

The distance from the base of the mountains across the valley to the Sacramento on one hand, and the San Joaquin on the other, is some 30 miles. Emptying into these two rivers, and flowing from the Sierra at right angles with them, are the other principal streams, generally about 25 miles apart, and running parallel.

Shortly inside the foot-hills they branch off, each having its north, south, and middle fork, which, farther up, in turn fork again, until the whole region becomes watered by innumerable branches, in a manner more complete than the most skillful engineer could possibly devise.

The reader will please bear in mind that the two great rivers—the Sacramento and the San Joaquin—do not extend to each end of the State, the Sacramento heading 100 miles south of the boundary line of Oregon, and the San Joaquin 200 north of the line of the Colorado. This, however, makes no difference, other rivers taking their places, making the same description equally good; and besides, I wish it distinctly understood that I make these statements in general terms, and not strictly to the letter.

Still beyond the foot-hills, and adjoining them, is yet another strip, twenty miles wide and running their entire length. This section lies just inside of what is known as the snow belt; and in order that the distant reader may the better apprehend my meaning, I wish to state, that the Sierra Nevada runs the whole length of the State, on its eastern side, the ascent commencing at the base of the foothills in the valley, and increasing in altitude until the summit is reached, which is 10,000 feet, more or less, above the level of the sea. This second section is likely to have snow in the rainy season, but it all disappears very early in the spring; and there will, one day, be the great apple region of America.

Much has been written and said in praise of

the valleys of the Golden State, and most justly, too, but they constitute only a portion of the soil; the great, crowning glory of California being her peerless and magnificent foot-hills, that have thus far been comparatively overlooked, but which will soon prove to be, viticulturally, as they were for minerals in the early days, her greatest and most prolific source of wealth.

The reader will remember that they constitute the entire mining section from which, as I before remarked, \$1,500,000,000 has already been extracted.

The climate is absolutely delightful, and, at the same time, the healthiest upon the face of the earth. As I before remarked, they stretch north and south the whole distance of the State, and one living there can gaze upon a panorama of landscape beauty, that I do not hesitate to say has no equal in all the world. The length and breadth of California spread out before the eye, with the placid waters of the Pacific beyond—the view taking in at one sweep an hundred miles to the right, and the same number to the left, the whole forming one of the most soul-inspiring pictures possible.

Children reared by good, honest parents, amid such transcendently glorious scenes as these, and having for a pursuit so ennobling a business as viticulture, can not fail to become, and certainly will eventually, the finest types of man and womanhood the world has ever known.

Where, I would ask, is the miner that, in the early days, lived and worked in this region, who will not heartily endorse every word I have written in this connection, and then say I have given but a faint and feeble sketch of its most unprecedented beauty.

I know I am using strong language, but in proof of what I have stated, I call as witnesses every person who either lives at present, or ever did reside there.

Who that has been there during our long and glorious summer has not sat for hours listening to the melancholy tones of the mourning dove, felt that sweet spell gently steal o'er the senses, and afterwards arisen, feeling him or herself a better man or woman, with truer impulses and nobler aspirations? It is these beautiful, purely natural influences that form the character of the child, make better beings of us all, and finally give tone, stability, and moral grandeur to the whole commonwealth.

Let the reader for a moment contrast a life like this, amid such delightful surroundings, with that barren, heartless, hollow one in the city, whose votaries spend their days in vain efforts to appear what they are not, and whose minds are exercised almost to desperation over a mighty attempt to solve the great problem of which is the most stylish, a round-toed shoe or boot, standing or turn-down collar, and who consider the noblest aim of a female, anywhere between the ages of sixteen and sixty, should be to dress after the latest and most approved manner of the demi-monde of Paris, and then leaving home and children, if she has any, to take care of themselves, strut her brief hour or two upon the principal sidewalks, to be admired, gazed at, and commented upon by the brainless statues who stand on the corners all day long, neither toiling nor spinning, but, on the contrary, pursuing a life of complete idleness, and living off the wages of marketable and shameless sin.

To return, however, to my original subject, the foot-hills of California constitute the very best fruit and vineyard land in the State, and can be purchased at present at from about two and one-half to five dollars per acre, and, in many cases, be pre-empted. It has been practically demonstrated, over and over again, that mountain fruit is far superior to that raised in the valleys, El Dorado and Placer county peaches especially, commanding a much higher price.

But thus far I have only enumerated a few of the great advantages of this wonderful region. Does the emaciated, consumptive invalid look upward, and, in tones that would melt a heart of stone, cry out in absolute despair, "Oh, God above, is there no spot in this world where I can go and possibly find relief?" California instantly appears in the garb of an angel of love and mercy, and pointing to her own genial, health-giving foot-hills says, "There, is the spot designed by the Great Creator expressly for you. Go to it at once and, at an altitude of 1,200 feet, 'live' free from the nauseous taste of cod liver oil,

expensive visits of a doctor, and, if not already too far gone, die finally not prematurely, but at an advanced and ripe old age."

Does the man of small means desire to establish a home for himself and family in some healthy where it will not require all the money he has for the necessary dwelling-house, out-buildings and land, this is most assuredly the place. Here he can get, for instance, 60 acres for \$150 to \$300. Three hundred dollars more will build a good, substantial house, large enough for six persons, made of plain boards with the cracks battened, which will prove all that is necessary in a climate like this. He needs no barns for his stock, a simple shed being sufficient, and, if any sort of mechanic, he can do all the carpenter work himself.

Instead of laths and plaster, a lining of n-bleached sheeting is first tacked to the sides of the rooms, and then the custom is to paper on top of it. Sheeting is also used overhead for the ceiling, and when completed, the rooms will have a fine finish, at merely nominal cost, all the work having been done by himself and family.

After this, he can set an orchard and vineyard and, if possessed of \$2,000 at the start, will soon be on the high road to wealth. How much better this is, than paying the same amount for a lot in the city, having nothing left to build a house with, and being obliged to resort to a mortgage, the chances being even, that he will finally lose all.

Does the man of wealth and plenty of leisure wish to find a locality where he can obtain the largest amount of real rational enjoyment, purest air, most superb climate, with every variety of flesh and fowl, the most delicious fruits and vegetables, with the finest qualities of native wines to tickle his palate, a garden filled with the rarest plants known to the botanist, scenery more beautiful and far grander than that of Switzerland, railroad communication with all parts of the Union close at hand, and the daily papers almost before he eats his breakfast?

If so, he will find all these comforts and very many others in the glorious section I have described, and, if disposed, can build a home and concentrate within it every comfort and luxury the combined climates of the world afford.

Well may it be said, and never were truer words uttered, than the simple statement that the foot-hills of the Sierra are the grand crowning glory of California. It was in them, 35 years ago that Marshall made the great discovery that shook civilization to its very center. When another period like that shall have elapsed, the whole region, from Oregon on the north to Arizona on the south, will have become the grandest, richest, and most beautiful portion of the continent. The whole section, divided into hundreds of thousands of the happiest, and most independent homes that have ever been reared since the foundation of the world.

Reader, this is no idle dream but, on the contrary, a true statement of what is bound to be—an actual, living reality, and every person, within the confines of the State, who is acquainted with the foot-hill region and its mighty resources, will readily endorse every word of it. Rich as the valleys of California are, they only constitute the skim milk, while the foot-hills, the cream.

They are open to settlement; and almost anyone can have his little kingdom there, who desires it, almost without money and without price. This state of things will not last long, however, as immigration is commencing to pour in by the various overland lines already built and being rapidly constructed. As I said before, they are destined to become the great fruit-producing region of America; and I will close my remarks with the statement, which I unabatingly make, that the finest wines which have ever been produced in any quarter of the world will yet be made from the grapes raised in the foot-hills of the Sierra.

SAN FRANCISCO, April, 1883.

## NATIVE COTTON.

We are in receipt of a specimen husk of cotton, grown by Supervisor Foreman on his place a short distance above Bidwell's Bar, in Bidwell township. Mr. Foreman's place is in the foothills, between the North and Middle forks of Feather river, and he has shown by the introduction of water that it is capable of producing anything in the way of cereal or tropical plants and fruits. The intention is to plant a small quantity of the seed, and test the climate and soil of Chico for the production of cotton.—Chico Enterprise.

## MISSION FRUITS.

The San Luis Obispo Tribune says: Many years ago this was called "the city of the olive tree." The old missionaries nearly 100 years ago planted the olive, fig, pear, and grape, and all grew and thrived wonderfully. Fig trees grew in the Mission grounds so that their branches spread over an area of 60 feet in diameter, and the body of the trees, in numerous instances, exceed four feet in diameter. The stumps of some of these still stand as proof. At the Mission of San Miguel pear trees were destroyed, not many years since, that had borne fruit for three-quarters of a century. The San Luis Obispo Mission once received a large revenue from its manufacture of olive oil and pickles from the olive trees it cultivated, and its vineyard was quite celebrated. Figs and olives are semi-tropical fruits. They were the great products of San Luis Obispo in former times. The thrift and prosperity of the Mission ceased, and an interregnum of indolence ensued. We are now in an era of new life and prosperity. Fruits of every variety are grown successfully, although not so generally as in other parts of California. Those who have tried have succeeded far beyond their expectations. There are, undoubtedly, some localities where the sweep of the ocean winds blast some kinds of fruit, but generally fruit grows to as great perfection as in the most favored parts of the world. We have had apples, pears, and grapes from Mr. Frederick's farm, which is between the city and the bay of San Luis Obispo, on the San Miguelito Rancho, that could not be surpassed anywhere. The apricots, cherries, plums, peaches, apples, and grapes shown by E. W. Steele, on the Corral de Piedra, were among the very best we ever saw. Grapes grown in the Estrella and Salinas valleys are said to be sweeter than those grown west of the Santa Lucia range. The apricots of the hilly region west of Pismo Robles, extending to the coast, are represented as far superior to any brought from the north. This is a broad range, where experiment has proven that every variety of fruit will grow to great perfection, but it was of oranges we proposed to speak. In many of the gardens of this city are found oranges, lemons, and limes growing luxuriantly, and giving much pleasure to those who have taken the trouble to cultivate the trees. A short time since, we took a stroll to the pleasant residence of Senor Munoz, in the eastern suburbs of San Luis Obispo. There we found trees more than twenty feet in height loaded with oranges, and smaller trees bearing an abundance of excellent lemons. All the trees were seedlings, planted by the lady herself. The oldest trees were nine years of age, and each bore several hundred oranges, rich in their bright golden color amid the dense foliage of dark green. Wherever seeds have been planted they grew without trouble and without care. The residence is upon the hillside overlooking the city and a broad expanse of country, and it is embowered in evergreens of orange, lemon, pepper and eucalyptus trees, is one of the loveliest localities imaginable. This is said to be in the "warm belt," and therefore more favorable for the production of the orange than other localities, but the fact that oranges grow on the banks of San Luis creek, which is not considered in the warm belt, is proof that there is no very cold belt anywhere. We may conclude that oranges will grow almost everywhere throughout the county except, perhaps, in the high regions beyond the Salinas, or on exposed parts of the coast.

## OUR WINE AND GRAPE INTEREST.

Though the grape industry is yet in comparative infancy, it is a child of lusty growth. Ten years ago the yield of California claret was from 500,000 to 600,000 gallons; last year the claret vintage must have reached 3,000,000 gallons. Ten years ago there were 5,000 or 6,000 cases of champagne made in this State; five years ago there were 8,000, and last year there were 18,000 cases. The vintage for the State last year has been estimated as high as 10,000,000 gallons, the lowest being 7,000,000; while another authority estimates the California wine and grape product of 1883 as representing a money value of \$4,500,000. The new tariff will prove a serious blow to the import trade, already crippled by the competition of home-made wines, and the extent and character of viticultural pursuits in California justify little them to the position of the second great industry of the State.—Russian River Flag.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 330 Sansome St., Halleck Building.

ISSUED MONTHLY

Terms ..... \$2 per Annum.

SAN FRANCISCO.....APRIL, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come and send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS.

First Page.—San Joaquin County.  
 Second Page.—San Joaquin County, Continued.  
 Third Page.—San Joaquin County, Continued.  
 Fourth Page.—San Joaquin County, Continued.  
 Fifth Page.—San Joaquin County, Continued.  
 Sixth Page.—Humboldt County's Improvement.  
 Give the Land a Rest.—Mountain Beauty.—White Egyptian Corn.  
 Seventh Page.—The Foothills of the Sierras.—Mission Fronts.  
 Eighth Page.—The Triennial Conclave.—The Late Rain and the Crop Outlook.—Pumping Water.  
 Ninth Page.—California Wines.—The Illustrated Tourist's Guide.  
 Tenth Page.—Humboldt as a Frontier.—San Diego's Citrus Fair.—Colony on the Pacific—A Great Grape Cutting Business.—The Hard Wood.  
 Eleventh Page.—A Gigantic Warehouse.—Timber Culture.—Subirrigation.—Fears Concerning Crops.—Apparatus in the Conclave.  
 Twelfth Page.—Gilroy Pears.—Copper Mining.—A Wonderful Vine.—A Rich Field.—Rapid Improvement.  
 Thirteenth Page.—The Arizona Industry.—Dry Season.—Fruit Growing.—A Busy Town.—Santa Clara Valley.  
 Fourteenth Page.—Semi-Tropic Products.—Fruit Canning.—A Good Word for Butte County.—Fruit Culture.—Sonoma County's Advantages.  
 Fifteenth Page.—Valuable Land.—A Woolen Mill Wanted.—Ahead of All.—Farmers' Prospects.  
 Sixteenth Page.—The California Fruit.—Planting an Orchard.—The Pacific Coast and Its Surroundings.—Yolo Industries.—Sale of the Grizzly Estate.

## THE TRIENNIAL CONCLAVE.

We observe with pride that, as the time approaches when large crowds of people will visit California (from all parts of the United States) for the purpose of attending the Triennial Conclave to be held in this city in August, our citizens, generally, are busily engaged in making the necessary and suitable arrangements for their reception and entertainment while they remain among us as our guests. From the responses already received, from many commodories at the East, by the Committee of Arrangements, there is now sufficiently definite information to warrant the belief that, at least, 10,000 Knights Templar and, perhaps, double the number, will visit California on this occasion; and it is thought that the families of the Sir Knights, who will accompany them, will increase the number fully 100 per cent.; and will, in all probability, be the largest and most distinguished gathering of people that will take place in the Westernmost State of the Union for many years. The Triennial Committee, composed of representative Sir Knights of this commonwealth, hold regular meetings for the purpose of discussing matters of interest relating to the success of the coming Conclave. There are thousands of people at the East who are not Knights Templar but, wishing to avail themselves of the opportunity to visit the Golden State, are losing no time in becoming qualified in order to take advantage of the reduced passage rates, and participate in the grand tour across the continent. Hence, it is to the interest of our business men, as a matter of city and State pride, to contribute liberally to the funds of the Committee of Arrangements. As stated by a city contemporary not long since, San Francisco's movements in the matter are now being watched in all the principal cities of the United States. It is found that we are making generous arrangements for the entertainment of our guests, the number will be largely increased. This is the proper view to take of the matter; therefore, let the subscriptions be on a liberal scale. In the language of a sagacious and far-seeing gentleman: "A handsome subscription to the Knights Templar fund will be the best stroke of business San Francisco has done for many years." Every citizen who has the interest of the State at heart should contribute to the fund as liberally as his means will permit. It has been estimated that the direct expenses of the necessary preparations for the Conclave will reach from \$80,000 to \$100,000. Our coming visitors will be composed of a class of people that will be of in-

enue benefit to our young State. They are the representatives of the very best elements of every department of industry and social life, whom it will be an honor to know and a pleasure to meet. Of course, they will take care of themselves while here; but there are social amenities and courtesies to be extended that will involve a considerable outlay.

We anticipate an influx to the State after these visitors have returned and reported to their Eastern homes; and it is a safe calculation to make, that numbers of them will conclude to settle up their affairs, and return and make permanent homes in the State which they learned to like during their brief sojourn in it. This has been the case, in the past, with a large class of people who came to California with the view of only stopping in it a few months as a winter resort; and we see no reason why temporary sojourners, like the Sir Knights and their friends, will not pursue the same course. To our mind, there are sufficient reasons why many of them should conclude to make their future homes here. They will, as a rule, be composed of men possessed of considerable wealth, great foresight and sagacity. They will, after visiting many places in California, readily observe that there is more prosperity and rapid development of the resources of our State, in proportion to the number of its inhabitants, than can be found elsewhere, and conclude that there is no other community which will compare with the Golden State in point of climate, richness of soil, and natural advantages for great business enterprises. In our judgment, there is no other State that holds out so many inducements to immigrants with some means, strong hearts and willing hands.

Our visitors, in traveling over the State, will observe that since the discovery of gold it has been gradually filling up with an enterprising population; that great areas of land have been brought under cultivation and made to yield golden harvests; industry and art, in multiplied forms, have made rapid strides of advancement; established cities and towns have given permanency to business and made comfortable homes. All that is needed is a fair and reasonable presentation of our varied resources and wonderful productions to convince capitalists, who soon will visit us from every State in the Union, that no country in the world surpasses the Golden State.

The importance of this visit to our State, in the beneficial results that may flow from it, can not be overestimated. A better opportunity will, perhaps, never be offered California to make known abroad her advantages, and increase its population with worthy, wealthy and enterprising people. Every community throughout the commonwealth should make arrangements, for its own sake as well as for the State, by receiving and properly entertaining these distinguished visitors. They should spare no pains in showing them the natural resources and the developments which have been made in their respective localities. Whatever money or effort may be expended will bring a thousand-fold return in the way of benefits, to say nothing of the satisfaction and pride every citizen must feel in having California make a creditable showing of the resources and the advantages she has to offer immigrants, when they shall come in review before the assembled gaze of the representatives of the entire Union. As there is no doubt but every part of the State will be visited by the Sir Knights, every Californian, however humble or exalted his station, should feel interested in having them as truthfully impressed as possible with the extent of the resources and material progress of his section. On their return to their respective homes, the opinions expressed will have great weight, and, to a considerable extent at least, will affect future immigration. The reports that will be sent to the Eastern and European press will also have a pronounced effect. In short, this is a good opportunity to present California as she is. Let us do it.

## INVESTING LARGELY.

Mr. CHARLES CHICKER has invested, outside of his magnificent residence, nearly two millions of dollars in buildings in San Francisco, within the past two years. He is also constructing immense irrigating works in Merced county. This canal will irrigate 128,000 acres. The land to be irrigated lies in Merced and Stanislaus counties.

Who will first commence to throw mud at this soulless, "blonded bombthrower"? It is nearly time to begin again.

## THE LATE RAINS AND THE CROP OUT-LOOK.

The rain-fall, during the last week of March and the first few days of this month, has been sufficiently abundant to dispel all fears of a failure of crops. In nearly all sections of the State the general opinion is, that there will be not only a larger area of grain harvested this year than ever before, but the yield per acre, in most sections, will equal that of last season. From nearly all localities come encouraging reports of the agricultural condition of the State. The farmer, the burden of all human beings to please, in most cases, is happy and joyous now. It would certainly seem as though California was now looked for good crops. The rain came just in time, in just the right order as to quantity of distribution.

In many districts where despondency had been created, by long continued drought, a feeling of confidence now exists. The rains have been of great benefit to fields recently sown, and will make it possible for farmers to extend their acreage, even at this late date. Judging from the very latest reports, we think it may be stated, with absolute certainty, that with occasional showers, during the next six weeks, the crops, in the districts which seemed but a short time ago doomed to failure, will be tolerably good. There is time enough yet for more rain, and the records of all previous years will justify the expectation that it will come. Grain which was thought beyond redemption, says the *Merced Express*, in every instance, so far as we have been informed, will yield a fair crop. The intelligence comes from every quarter of the county, that the yield of wheat and barley will be unprecedentedly large if the weather during April does not prove exceedingly unfavorable. The moisture in the ground will defy any common north wind, and none but chronic croakers anticipate any danger.

Reports from all parts of Tulare county, says the *Visalia Delta*, state that there will be an average crop this year. Much of the grain that was thought dead has already shown signs of life. The plains seem to be the only part of the county where any serious damage was done by the drought and it is believed that even there the crops will be good. So far there has been no cold weather to injure the fruit which promises an extraordinary yield this year.

In speaking of the value of the late rain-fall in San Luis Obispo county, the *Tribune* says: It is of incalculable value. It is, what can be said of few things, an unmixed good. We hear on all hands varying estimates in hard dollars of its benefits to the county. Some of the calculators say the rain will make a difference of one million of dollars in the yield of the various farms products, while other and more enthusiastic fellows put the difference in our favor as high as a million and a half.

The *Ventura Signal* says: The last glorious rain completely breaks the back of the dry season, and the copious showers, coming as they did in the nick of time, have guaranteed splendid crops, where without it we would have had nothing.

The *Merced Express* says that it was very common to hear people, on the street, remark: "This is \$10,000 in my pocket;" "this brings me out all right; everything I had was in that piece of grain," etc. Then it is no wonder people are happy and glad.

The *San Benito* papers say that the inhabitants of that county are jubilant, on account of the late rains. All fears of a dry season are cast aside, and San Benito county will turn out a large yield of grain and hay.

The *Colusa Sun*, in speaking of the crop prospects of its county, says: What a change a few days have brought about! At this time last week there was hardly a farmer in the county that would not have compromised on "feed and seed." Some of the late sown grain still looked good, but the ground was dry and rain must be had soon. The rain came and it set everything booming. To some individual farmers it is worth tens of thousands of dollars, and to the county millions. Wheat plants that actually appeared dead have commenced to send out new roots and new sprouts, so that there are many fields that will not rove to some extent. Of course, it is too early now to determine the full effect of the rain, but it is a Godsend for which the people ought to feel truly thankful.

The *Los Angeles Herald* says: The rain is worth millions of dollars to Los Angeles county; and it is, altogether, the most auspicious

event which has been recorded in our local history for a long time past. It has proven to be warm, abundant and most timely. The *Mirror* adds the following: This rain puts millions into the pockets of California farmers and business men, and puts the country in fine shape again. Hundreds of tons of hay will now be made where two days ago the owners expected to even lose their seed, and much that would have been cut for hay will now make grain.

A writer in the *Santa Ana Standard* states that never in the history of California, perhaps, has a rain been so timely and valuable as the general storm which has fallen over the State during the past few days. In the northern and central counties it was especially acceptable, and makes a season which threatened to be one of drought and disaster to almost the entire State, as far as the cereals were concerned, one of reasonable promise.

A correspondent of the *Sacramento Bee*, who has recently traveled over the agricultural section, states that uppermost in people's minds is the subject of crop prospects, and it is gratifying to note the fact that the late rains brought joy and contentment to many thousand homes throughout California, where the gloom of despondency had begun to set in about the family board. A wonderful impetus has been given to all kinds of crops, and the country is now rich and heavy with verdure.

A correspondent of the *Modesto Herald* says: Stanislaus county will roll up the largest wheat crop of any county in the State. The average sown is larger than ever before, and the west side, which was partially lost last year, will add largely to the total amount.

The *Solano* papers declare that theirs will be the banner wheat-growing county.

The above extracts are only samples of hundreds of others which we might quote. But they are sufficient. The late copious rains were so general as to leave no section without benefit. It is now certain that the great majority of the grain crops have been saved, and that the fruit crop will be exceedingly abundant. The result upon the general trade and industries of the State is almost incalculable. The outlook throughout the State, at this time, for the farmer is certainly of an encouraging character. There is every reason to believe that 1883 will be counted among the most prosperous years California has ever had. In addition to gathering a large harvest, buildings will be erected and improvements made throughout the farming districts, which will cause labor to be in good demand in every department of industry.

## PUMPING WATER.

What can be done in irrigating land, with a water supply obtained from the ground by pumping, was illustrated last season at R. B. Blower's vineyard, near Woodland, Yolo county. It is stated that from a well 20 feet in diameter and by means of machinery that he employs, using straw for fuel, he can pour on any part of his land 150,000 gallons of water per hour, or a little more than three and one-half millions in 24 hours. One piece of ground, containing six acres, he flooded entirely with water in eight and one-half hours. This water, if sold at the price the Board of Supervisors of Yuba county fixed for water for purposes of irrigation, would yield him a revenue of \$22.50 per hour, or a daily income of \$225 for each ten hours or a monthly revenue of \$5,625 for each 25 days. With the aid of irrigation Mr. Blower has raised as high as seventeen tons to the acre of seedless Sultan grapes. This was from six-year old vines. When planted from cuttings, two years old, they yield him about four tons per acre, and rooted vines of the same age will yield eight tons per acre.

## F. A. HATCH &amp; CO.

This firm, whose card will be found in another column of this journal, do a careful and thorough business, as commission merchants. They advertise to make liberal advances on consignments. The head of the house, F. A. Hatch, we have known for many years. He is industrious and unswerving in integrity. Give the firm a trial, and our word for it, all consignors will be satisfied with the manner in which their business will be transacted.

THE RESOURCES OF CALIFORNIA is the best paper to send to your friends abroad.



## CALIFORNIA WINES.

The following, we take from the editorial columns of the New York Evening Post of recent date:

The trade journals are again directing attention to the fact that a large portion of wine sold in this country as foreign wine is produced in California, and sold in bottles labelled with imitation foreign labels. A beaver street wine merchant said yesterday, in speaking of the matter, "The chief trouble is that of the middle-men, the wholesale wine merchants who buy from the wine-maker and sell to the retailer, are interested in keeping up the deception, because by means of it they are enabled to buy cheap and sell dear. It is to their advantage to cry down American wines as inferior to foreign products, and when once they have got American wine for what they really are, he finds more opposition from the men who sell American wines under foreign names, than from the few houses which really deal in foreign products. Every possible trick is resorted to for the purpose of disguising the fact that the wine sold is California wine. Even in San Francisco, where some local pride might be expected to help the sale of native wines, they are bottled and sold largely with French labels, some being imitations of labels of celebrated houses and others being more innocent of deception because they do not steal trade marks. Since the passage of an Act imposing a fine of \$500 for selling wine with forged labels, the fraud is carried on more carefully, and cases of bottles are sent by the merchants to retail dealers without labels, and the labels are sent separately and are pasted on according to the demands of customers. One case of American wine can, by this system, make a label do service for half a dozen French brands. In nine cases out of ten, according to a letter recently published in the *American Fruit Grower*, what is sold as French wine in California is made there. The immense profit in deception is what keeps it up. The effect is detrimental to wine-makers who do not reap any advantage from the increased consumption of their wines. I have seen in the bottling rooms of California wine-bottlers, in the mountains of bottles, out of which very few could be picked which were not ornamented with spurious labels. The manager of an establishment said to me: "These bottles come from all parts of the State. You see that these foreign labels, and doubtless their contents, are sold as imported wine." Taking up a bottle indiscriminately, I read such labels as "Cantencue Medoc, 1864, D. Misset, Bordeaux," "Margand Medoc, F. Kuppel & Cie, Bordeaux," "A San Francisco bottle of Sauterne was branded on the cork, "Pouget Fils, Bordeaux." It was a genuine bottle, and had a San Francisco label of "Cantencue, Pouget Fils, Bordeaux." On a California-made bottle was a label of what purported to be German bottle, "Rosen Thier, F. Weller & Co., Mainz," was stuck on a French claret bottle. An imitation of a bottle of La Rose later I could be bought in San Francisco at \$1 a thousand. There might be said on a gold many a facsimile of the "Duc de Montebello." The label might be seen on a California bottle, and on another a label of an imaginary firm, "E. Blossier & Cie, Lyons."

A dealer in nothing but California wines, who sells them as such, and is trying to educate the public taste to like it, under its true name, said the California wine-growers have themselves to thank for the present condition of affairs. Instead of devoting themselves to make a pure wine, they attempted to do up all kinds of devices to imitate European wines in color and flavor, and thus played directly into the hands of the importers. As to the fact that an enormous quantity of California wine is sold under foreign labels, there is no doubt of it, whether it is true or not. It is a fact that not one-twentieth of the wine sold to consumers in this country in 1880 was sold as American. Four hundred and fifty thousand gallons were sold in one month to foreign importing houses in this city; 100,000 gallons to Spanish firms, and that is up to the point of having anything to do with such "stuff" as American wine. The only remedy is for wine producers to establish their own agencies and create a demand for native wines."

A member of a French importing house said: "The doubly-doubtful American wine is sold under foreign labels, but it is still possible to buy real French wine."

The journal from which we take the above has, of late, had considerable to say concerning our California wines. While that paper does not, perhaps, intend to wilfully misrepresent the quality or quantity of wine made in this State, still articles of which this is a fair sample convey an incorrect impression, and will be the means of injuring one of our most important industries.

Now, in regard to California wine being sold in bottles with foreign labels on them, we have only this to say: We are perfectly certain that there is not a California wine-grower who does not desire his wines to go before the public just as they are made, without adulteration or misrepresentation, and with the understanding that they must stand or fall on their own merits. We believe that our wines are far superior to the basely adulterated articles bearing a foreign brand, which find ready sale among a certain class of people here and in the Eastern markets. There are many gentlemen in San Francisco, who were born and raised in the wine and grape-growing countries of Europe, that unhesitatingly declare the superiority of California wines. In our judgment, if our wines are adulterated, after leaving the possession of our wine-growers and manufacturers, it is because they are prime and will stand it; for even then they are pronounced, by connoisseurs, to be superior to the foreign adulterated article. We learn from English papers that, for a long time, the English wine drinker has been huddling the artificial preparation of sharp Frenchmen, under the impression that he has been drinking the pure juice of the grape. He is gradually having his eyes opened to the fact that about nine-tenths of the so-called claret and port wine, imported into Great Britain from France, is not wine at all, but simply soaked figs, currants, basins blossoms, etc., doctored to suit the fastidious palates of the British high-livers. The London *News*, in commenting on the "browbeaters of the French and the stupid credulity of the English, who buy these vile imitations of wine, expresses its amazement that

the importers of England do not pay attention to the wines of California, which are noted for their purity. The surprise of the *News* seems to be genuine that a promising market is not explored by its merchants.

We regret to say that it is a fact, well known to American dealers in wine, that nearly all the snobs of California and other States judge of the character of wine by the labels on the bottle. "These remarkable connoisseurs," said a gentleman a few days ago, "would drink colored rain-water and pronounce it delicious, provided it cost three or five dollars a bottle, and had a brand with the words 'Chateau d' something on it.' And he added that "if the 'fool killer' were sent on a visit to the mansions of some of our shoddy aristocrats, a great many of these connoisseurs would be heard of no more."

The New York *Post* justly says, that if California wines continue to be sold under foreign labels, they will never make a reputation of their own. But who are the parties that adopt the foreign label for our wines? Certainly not the California vine-growers and manufacturers. We are personally acquainted with nearly all of the leading wine-growers of the State, and we know that we make no mistake when we say that not one of them would be guilty of perpetrating such a fraud. They take a pride in sending forth their wines, just as they are made, to the public to stand or fall on their own merits. If foreign labels are used on California wines to the extent that the New York *Post* intimates, we say again that our wine manufacturers are not in any way connected with the fraud, for they can stand upon their own merits without any adventitious aid.

Our wine-growers meet, quite often, in conventions for the purpose of listening to the experience of each other regarding the best methods of cultivating the vine for wine-making. They, as a class, believe that wine-making is destined to be one of the most important industries in the State. In the last convention samples of nearly every variety of grapes now cultivated were exhibited, and a free interchange of experience was had. These plain talks between practical and observing men, serve to enlarge the general knowledge of those engaged in the industry of wine making. At this convention an old and successful wine-grower from France, but now engaged in the business in California, remarked, that this rich new State does not afford a more certain future than can be found in grape-growing and wine-making. Another delegate said that the day is not remote when the grape will be a more valuable crop in California than wheat.

Arpad Harazthy, President of the State Board of Viticulture, stated recently, in the course of an article in the *Sacramento Bee*, that wine-making in California is a success. It has taken, said he, twenty-five years to prove it, but it is proven now beyond a question. The most sanguine supporters of this pursuit, of a quarter of a century ago, have lived to see their prophecies verified. They can now look back with pride and contemplate the labor, and rejoice at their final success. Mr. H. says that this once despised and belittled production has come to the front, driven away, not only from among ourselves but from the whole United States, the cheaper grades of imported wines, and are even now asserting themselves as rivals to the better class of French, German, Spanish and Portuguese wines. In his opinion, it will take but a few years more to see all but the nobler growth of foreign wines retired completely from our markets. Mr. H. states that the importation of French and other foreign wines is diminishing every year.

There is no doubt but Mr. H. is correct in this statement. The wine export of California is evidently beginning to affect that of France and other European countries. Statistics show that the French vintage of 1882 was 70,000,000 gallons less than that of 1882, and 360,000,000 gallons less than the average vintage of the last ten years. This industry, in California, has not attained its present prominence without encountering many discouragements and difficulties. Several prominent wine-growers have been engaged, for years, in developing the quality, and spreading the merits of California wines, for which they are justly entitled to a large meed of praise. The wine-growers have to congratulate themselves upon the exceptional prices they obtained for their crop at the last vintage. In addition to the 12,000,000 gallons of wine made last year, there was manufactured something over 600,000 gallons of brandy.

The President of the State Board of Viticultural Commissioners estimated, something over a year ago, the value of vineyards in California to be nearly \$35,000,000, and the annual income he placed at about \$3,500,000. He thought then, that within three years they would be yielding annually to their owners \$5,000,000, or ten per cent. on \$50,000,000 valuation. The future of the grape interest, all over the State, is certainly very promising. A large number of new vines are coming into bearing this year which, with the increased volume from the old vines, make it absolutely certain that the coming crop will be the largest ever grown in the State. As far as the field for grape-growing is concerned, it is being entered upon by many persons, of both large and small means, and new districts are being laid out and cultivated. In this connection, we will state that Governor Stanford is having his large ranch of over 3,500 acres, at Vina, Tehama county, planted with vines. He means to be the greatest grape-grower in the country. But we understand that R. Nadeau, of Los Angeles, is, at present, the largest vineyardist in California. Charles A. Wetmore, State Viticultural Commissioner, is of the opinion that one of the most promising fields for investment and industry is that of viticulture. He believes that a well-selected piece of land cultivated skillfully in vines, for wine-making, will yield an average of \$100 per acre, when in full bearing, after paying expenses. He estimates the cost of bringing a vineyard to full bearing, in good localities, including price of land, at from \$50 to \$100 per acre.

There are millions of acres specially adapted to vine-growing in the foot-hills and mountain sections, which can be bought at from three to ten dollars per acre, that, in a few years, will yield \$100 per acre. Now, we ask, in all candor, at what other industry can a man make \$10,000 a year as easily as he can from 100 acres of grape lands? Why, the poorest man in the State to-day, if he is full of energy, patience and endowed with good hard sense, can earn money enough with which to buy the land, at day labor, in a year. And he can, in the course of a few years, prepare and plant the vines and bring them into bearing.

It has often been said, by those whose opportunities for judging have been good, that there is no land where the vine flourishes in such luxuriance as in California. The most favored portions of the costly vineyards of France and Germany, even in favorable years, do not equal that of our ordinary yield; and it is, possibly, for this reason that the vineyard industry of our State has awakened such interest within a brief period. No other land can compete with California in the bountiful product of her vineyards. The magnitude of her wine interest may be best understood when we state that it has now upwards of 120,000,000 vines. Concerning the progress already made, and the rapidly increasing acreage of our vineyards, it is evident that the wine product of the State must shortly become one of the most important of our great staples.

Several European and Eastern papers have, quite recently, spoken in high terms of California wines. They welcome them because they are good, and infinitely superior to some of those produced on the banks of the Rhine and other places. We could furnish abundant proof that our wines are not only appreciated at home, but also in the Atlantic States and Europe. The reasonable expectations which Californians have indulged in concerning the high rank which wines, manufactured here, would attain are being realized. We trust that the time is not remote when the State will be greatly enriched by the revenue derived from the exportation of her native wines.

## AN ENTERPRISING GENTLEMAN.

J. Fitcher Spooner, Esq., of Stockton, the celebrated photographer of that city, is entitled to the thanks of her citizens for the able manner in which he photographed the city for the illustration on our first page. In order to get this picture Mr. Spooner was obliged to take no less than 80 negatives. This work cost over \$300, all of which Mr. S. donated for the sake of having his city correctly illustrated. We shall always have a good word for Mr. Spooner.

## A PORTABLE ELECTRIC LIGHTER.

A Portable Electric Lighter for \$5.00 is being extensively sold by the Portable Electric Light Co., of 22 Water Street, Boston. It is an economical and safe apparatus for lighting for home and business purposes. —*Scientific American*, New York, December 16, 1882.

## THE ILLUSTRATED TOURISTS' GUIDE.

Through the courtesy of its author, Mr. BEN. C. TRUMAN (the well known and pleasant descriptive writer), we have received a copy of a very handsomely covered and neatly printed pamphlet of 250 odd pages, bearing the above title. It is profusely illustrated with engravings representing the natural wonders of the Yo Semite and the Big Tree region, points of interest along the coast and the mammoth hotels. The book also contains full and accurate descriptions of all the celebrated summer and winter resorts in the State, with details of the routes thereto, rates of fare, etc.

The guide is full of matter of interest, not only to the traveler, but to the general reader; it is a compendium of information touching the situation, extent, topography and attractions of the sun-set State. The care exercised by the writer in giving unexaggerated descriptions is worthy of all commendation. He gives all the information regarding the subjects treated, by both facts and figures, that any one could desire. In our judgment, this valuable work will do more to induce tourists to visit our State than all of the other books on the subject combined. This may be considered, by some, high praise; but, without intending to flatter the author in the slightest degree, we believe it to be true.

The author states that his object in writing this volume is to point out to the permanent residents of San Francisco, and to tourists visiting the metropolis, the many health and pleasure resorts lying upon and adjacent to the lines of the Central and Southern Pacific Railroads and their branches, and to present such descriptions of scenery, conditions of climate, location of places, character of attractions, curative properties (or claims of curative properties) and analyses of waters of mineral springs, routes of travel and such other information as it might be possible for him to obtain.

The Illustrated Tourists' Guide is the result of continuous travels and observations from May until December, 1882. All who read this book carefully will readily conclude that Major Truman possesses special qualifications for writing such a work.

This complete and beautiful volume was printed and published by H. S. Crocker & Co., of this city, and is reported to be the largest printing job ever handled in San Francisco, the edition being 25,000. The enterprise of the Central and Southern Pacific Railroad Companies is shown in an order for 20,000 of these books for free distribution. Three thousand have been sent to Australia, 1,000 to China, 2,000 to New York and 1,000 to Boston. Two thousand have been mailed to all the prominent hotels, libraries, clubs and to noted Knights Templar. Five thousand copies of the edition will be sold by booksellers at fifty cents each. The balance are being distributed to all first-class passengers between Carlin and Merced.

## A HANDSOME STORE.

One of the handsomest stores in our city is that of NICOLL, "The Tailor," in the new Phelan block, on Market street. The display of cloths there is far greater than can be found in any other tailoring establishment in San Francisco. The proprietor, Mr. Nicoll, is a genial and polite gentleman, and so are all his employees. They guarantee everything to turn out just as represented. Pay the store a visit and judge for yourselves.

## F. A. HATCH &amp; CO.,

(Members S. F. Produce Exchange.)

## COMMISSION MERCHANTS,

122 CLAY ST., SAN FRANCISCO.

Flour, Grain, Wool, Beans, Dried Fruit, Honey, Etc.

LIBERAL ADVANCES MADE ON CONSIGNMENTS.

—AGENTS FOR—

Healdsburg X X X Flour

—AND—

UNION MILL FLOUR.



**HUMBOLDT AS A FRUITERY.**

Full one-half the width of the county lying next the eastern line is unsurpassed for the quality and perfection of fruit which it yields, and particularly in this case with that territory which lies on the water-shed of the Trinity and Klamath rivers. For perfection in growth and quality of flavor, this latter section is unequalled anywhere. It makes no difference whether you go to the southern end of the State, or refer to the storied orchards of the Orient. There is that combination of climate and soil on the Klamath and adjoining county, which has made it the home of the apple, the pear, the cherry, and other fruits that require like conditions. There are great tracts of Government lands, upon which the plats have been recently filed, which can be had of Uncle Sam merely for the taking, at \$1.25 per acre. On the Klamath, the objection can not be raised that it is entirely beyond reach of market. It is, at present for fresh fruits, but we have the whole world for a market for dried fruits, and the Klamath affords a natural and cheap and easy avenue through which to reach it. The cost of placing such freight on the steamer wharf at Crescent City, would be comparatively small, and the current of the river is available at all times for flat boats and canoes.

Those who will take time by the forelock, and plant orchards on the Klamath and Trinity, will have an independent income, measurably free from insects that devastate the warmer counties. Here we have sufficient snow and cold weather to destroy very generally, the larva that a more southern temperature nurtures into life. The Klamath is destined, at some future day, and not far distant, to carry a most important commerce to deep water, and it is truly a magnificent highway, easily to serve a large, rich, and naturally productive country. The wealth for which it affords so ready a means of transportation, is diversified, and among the richest in the country, comprising mineral deposits inexhaustible in extent for this and the next generation; timber, the finest and best on the coast, and, what we consider above and beyond all this, is what we have above mentioned—the production of fruit for which its capacity is measured only by the energy, industry, and enterprise of those who will avail themselves of the conditions and advantages offered. We firmly expect to live to see that section produce and export \$1,000,000 worth of fruit annually, carrying its traffic to market, on the waters of the Klamath, and that then it will be but at the threshold of its development.—*Humboldt Standard.*

**SAN DIEGO'S CITRUS FAIR.**

A writer in the *Examiner* of this city, who attended the Citrus Fair recently held at San Diego, has an article, in that journal, concerning the very attractive exhibition of fruit and other products. From it we quote the following:

Those who regarded San Diego as a barren country whose only resources consisted of climate, bay and hope, were agreeably disappointed at the splendid display of fruits—citrus and deciduous—made at the late Citrus Fair held at National City on the 13th, 14th and 15th of last month. A large hall, handsomely decorated with evergreens and flowers of all varieties, was filled with large tables on which was piled the most delicious appearing fruit in bounteous abundance. Oranges of all sizes and varieties, from the little dwarf Mandarin, no larger than a marble, to some that a truthful San Diegoan tried to palm off on your correspondent for a new variety of squash. This was a slight exaggeration, but they were fully sixteen inches in circumference. Then there were all kinds of lemons, limes, citrons, and kindred fruits until the eye tired with gazing at them and the mind grew confused in attempting to carry the names. But the exhibition did not consist of citrus fruits alone, for San Diego appeared determined to show at a glance what she was capable of doing in the whole vegetable domain, and we found numerous varieties of excellent apples, unsurpassed in size or flavor by any we have ever eaten. Altogether, San Diego's third annual Citrus Fair was a most decided success, and was so pronounced by thousands who visited it, among whom were the editorial excursion party.

**TOBACCO GROWING IN FRESNO.**

It is stated that a prominent and wealthy San Francisco physician has purchased a section of land west of Fresno city, who proposes raising tobacco on it. He has secured the services of an experienced tobacco grower to superintend the work. About 200 acres of land will be prepared and planted this season. The *Fresno Exporter* says that it has been demonstrated that tobacco grows luxuriantly on the irrigated lands of the county, and there is no question but that the quality, when properly cured, will be equal to that grown in the popular tobacco sections of the country. Should this plantation prove a success, the weed will be extensively cultivated here, as it is a very profitable crop.

**A GREAT GRAPE CUTTING BUSINESS.**

The *St. Helena Star* says: Martin Kaltenbach is the lion of the cutting business of all this region, and of the whole United States as well, for no other man in the Union makes as many as he. Mr. Kaltenbach, to begin with, is an old vintner, and all his life has made a specialty of grape vines. He has lived here since '73, and has been furnishing cuttings every year since, to greater or less extent, furnishing in the last three years, including this, about 600,000. He now employs an average of 25 hands making the cuttings, who work nearly four months, from about November 10th to March 1st. His trade this year reaches the enormous amount of 3,000,000, enough to plant over 3,000 acres. These are distributed over Napa county and all the vine-planning counties in the State, to the East, and even to the islands of the Pacific. Of these 3,000,000, about one-third are Zinfandels, another third of the different varieties of Reislings, and the other third is made up of the Chusculus varieties, Burgundy and a few Burger. Mr. Kaltenbach thinks that people are running too much now to Zinfandels, because they are plenty and cheap, and that they should pay more attention to the Black Reislings and Burgundy. He thinks these latter varieties will hereafter take the lead of the Zinfandels. Has just shipped a lot of 5,000 to the Sandwich Islands. They are an assortment, and are for experimental planting in that country. Mr. Allen Herbert, of Honolulu, is the purchaser, and the shipment is made through Leonard Coates, of Napa. Besides these, the various large vintners of the valley are each furnishing large amounts. Mr. Crabbs supplied, we are informed, at least a million last year. Mr. Krag about the same, Scheffler several hundred thousand, and other parties very large numbers. Taken altogether, we should judge that Napa valley supplied enough cuttings, last year, to plant 10,000 acres of vineyard.

**FINE HARD WOODS.**

A correspondent of the *Mexican Financier* calls attention to the great quantity of precious woods which, he declares, exists in Mexico. He says that from the frontiers of Guatemala to those of the United States there is a vast domain, whose growth of cabinet woods he describes as truly enormous. Among the varieties of woods which figure most prominently in the districts along the Pacific and gulf coasts, he instances mahogany, ebony, rose wood, ironwood, sandal and alio woods, and cedar. Concerning the last-named wood, he says that the Mexican variety, in addition to its rich aroma, possesses a grain so fine as to make it superior to many of the fine woods generally used in the markets of Europe and the United States. The only use hitherto found for the wood, the writer continues, has been in the manufacture of cigar boxes. He adds that, in burning lime he has used, for fuel, rich woods, which could have been sold for good prices, if known in the American markets. The *Financier* confirms the statement of its correspondent, in relation to the growth along the coast, and adds that, in the greater altitudes, hickory, hard cedar, pine, larch, oak, sycamore, and walnut flourish to perfection. It states that the rapid advance of railroads is daily making those supplies more available, and that for the encouragement of this industry, the various state Governments, as well as the General Government, are offering liberal concessions to all who will utilize and further develop the lumber resources of the country. The *Financier* calls the attention of American capitalists to the matter, saying that there is a large demand in Mexico for ordinary grades of lumber, and that the Americans are not only large consumers, but also important exporters to Europe of the finer varieties of wood. These latter, the *Financier* concludes, can be had in Mexico, in any desired quantity and variety.

The furniture of our new Hall of Records is mostly of Mexican cedar, which is a very fine wood. There should be no tariff on timber of any kind.—*Colusa Sun.*

**REAL ESTATE IN THE INTERIOR.**

Real estate continues to look up in Butte and Tehama counties. A correspondent of the *Oroville Mercury* says: A few months ago the owner of a small tract of land near Oroville placed the same in the hands of an agent to be sold for \$7,000. Last week a party came along in search of orchard land and offered \$12,000 for it. In the growing towns of Butte Bluff and Chico business lots command high prices, and the general outlook throughout Butte and Tehama, for future prosperity, is most encouraging.

Subscribers for THE RESOURCES OF CALIFORNIA.

**BUTTE COUNTY DIAMONDS.**

At Cherokee, diamonds and zircons are found in cleaning up sluices and undercurrents. The first notice of diamonds in this locality dates from 1853, the largest diamond, which was two and one-quarter carats, (nine grains), is now in the possession of John More. There have been from 50 to 60 found from first to last; some were rose-colored, some yellow, others pure white, and all associated with zircons, platinum, iridium, magnetic, gold, and other minerals.—*Butte Record.*

**FARMERS**

BUY THE BEST

**AGRICULTURAL MACHINERY.**

SCHUTTLE

**Farm Wagon,**

Warranted to last longer with less repair than any wagon made.

**Adriance Buckeye Mowers,**

For 23 years the leading Mower of the World.

**Taylor Wheel Horse Rake,**

The best Hay Rake on wheels.

**Dedericks Perpetual Hay Press,**

Has superseded all other Hay Presses. Puts 10 to 12 tons of hay in a car.

**Rice's Straw Burner Engines,**

Only successful Straw Burner made.

**GOLD MEDAL THRESHER,**

Does more and better work than any Thresher manufactured.

**Hodges and Case Headers,**

Superior in make and lighter in draft than any other Header.

**PERKINS' WIND MILLS,**

Warranted to run lighter, more substantial, better principle of construction, less liable to get out of order than any other.

**HOWE STANDARD SCALES,**

Superseding all other make of scales. Adopted by U. S. Government and all the leading Railroads of the Country.

**Glidden Barbed Wire,**

The standard Barbed Wire of the Country, ten times as much sold as any other Wire made.

**Enterprise Coffee Mills,**

The most perfect constructed Mill in use.

Nails, Rope, Plows, Cultivators and Staple Hardware and Agricultural Implements FOR SALE AT SAN FRANCISCO PRICES AT

**HAWLEY BROS.' HARDWARE CO.**

AGENCY,

Cor. Los Angeles and Requesa Sts., LOS ANGELES, CAL.

**HOME MUTUAL****INSURANCE COMPANY**

(OF CALIFORNIA.)

Organized 1864.

JANUARY.....1883.

**FIRE ONLY.**

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

OFFICERS:

J. F. HUGHES.....President.

J. L. N. SHEPARD.....Vice President.

CHAS. R. STORY.....Secretary

R. H. MAGILL.....General Agent.

**COMMERCIAL****INSURANCE COMPANY**

OF CALIFORNIA.

**Fire and Marine Insurance**

Capital, paid in full, - \$200,000.00

Assets, Dec. 31, 1881, \$377,457.82

Losses Paid Since Company was Organized nearly, \$800,000.

JOHN H. WISE.....President  
CHAS. A. LATON.....Secretary

**OFFICE.**

No. 405 California Street, S. F.

**J. D. SPRECKELS & BROS.,**

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS.

325 Market Street.

SAN FRANCISCO.

**CALIFORNIA SUGAR REFINERY,**

Manufacturers of the

**STANDARD SYRUP,**

A SUPERIOR ARTICLE.

Put up in Barrels Expressly for Home Consumption.

ALSO,

**EXTRA HEAVY SYRUP,**

In Barrels for Export.

**REFINED SUGARS,**

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.

G. F. SHEPHERD. J. PATTERSON N. W. SPANGLER

**PACIFIC SAW****Manufacturing Company,**

17 & 19 FREMONT STREET.

SAN FRANCISCO.

**A NEW WOOD SAW!**

THE LATEST, THE BEST.

The above illustration shows an AUTOMATIC SELF-STRAINING WOOD SAW PLANE. The saw is strained by means of a Steel Spring secured to the wood and by means of Metal Bands. With this device a saw is perfectly and automatically strained at all times. No cross bars or braces are required to give stiffness to the frame. The space in wood saw frames usually filled with such devices is left open, giving the saw greater flexibility for sawing large sticks of wood, wide planks or boards. There is no cross straining rod to get out of order.

Price, complete with Pacific Saw Mill Co.'s Extra Blade, set and filed, ready to work, each, \$1.00; with

their second quality blade, set and filed, ready to work, \$1.25; with their improved blade, set and filed, ready to work, \$1.50.

A LIBERAL DISCOUNT TO THE TRADE

AGENTS FOR C. R. PAUL'S

CELEBRATED FILES.

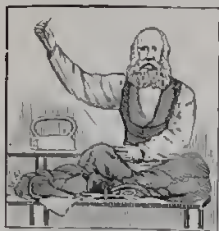
Planing Knives, Currier Knives, Saw

Mandrels, and Saws of Every

Description Made to Order.



**NICOLL,  
THE TAILOR,**  
(Branch of New York),  
**PHELAN'S BUILDING,**  
816 and 818  
**MARKET STREET,**



Cordially invites the public to visit his new store, where they will see the largest and choicest stock of English and Foreign specialties in Woollens for the Spring Season. Give us a call.

**WALK RIGHT IN,**  
Examine our New Styles, Prices and Quality. Civility to all. No trouble to show goods. Lightest and Largest Tailoring Establishment on the coast. Satisfaction guaranteed. Store lighted by Electricity.

**THE FAMOUS ENGLISH  
TINSEL  
SUITINGS.**

The golden threads among the green,  
Aesthetic colors blended in between,  
The silver threads raised in with brown—  
All colors in wool as soft as down.

**TO ORDER:**

Pants from .....	\$ 5 00
Suits from .....	20 00
Overcoats from .....	15 00
Dress Coats from .....	20 00
Genuine 6x Beaver Suits from .....	60 00
Black Doeskin Pants from .....	7 00
White Vests from .....	3 00
Fancy Vests from .....	6 00
English Cords for Hunting Suits	

**SAMPLES,**

With Instructions for Self-measurement  
with our Gazette of New Fashions,  
**SENT FREE.**

**NICOLL, The Tailor,  
Men's Furnishing Department,**

Also invites attention to his New Furnishing Department—Is the largest stock of the latest Eastern make.

**MEN'S UNDERWEAR,  
WHITE AND COLORED SHIRTS,  
CASSIMERE AND BLUE FLANNEL OVER-  
SHIRTS,  
PLAIN AND FANCY HALF-HOSE,  
NECKWEAR,  
SUSPENDERS,  
HANDKERCHIEFS,  
COLLARS AND CUFFS.**

**NICOLL, The Tailor,  
Ready-made Department,  
Has a large stock of Men's, Boys' and Youths'  
READY-MADE CLOTHING**

Of the Newest Patterns and Improved Styles,  
of our own manufacture and warranted  
shrink. Men's Suits from \$15. Boys' Suits,  
Overcoats, etc., etc.  
**SPECIAL ATTENTION** paid to patrons  
from the country.

**NICOLL, The Tailor,  
PHELAN'S BUILDING,  
Market Street,  
SAN FRANCISCO.**

**EDGE HILL  
VINEYARD, WINE CELLAR AND  
DISTILLERY,**  
Near St. Helena, Napa County, California.

**SCHAEFFLER'S CELEBRATED VACUUM DISTILLED**

**SANITARY BRANDY**

—AND—

**Brands of Red and  
White Wines.**

**STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED**

**Burgundy, Bordeaux and  
Rhine Wines.**

**Orders Received and  
Promptly Attended to by**

**WM. SCHAEFFLER,  
PROPRIETOR.**

**STOCKTON  
BUSINESS COLLEGE  
Telegraph Institute**

—AND—

**NORMAL SCHOOL**

**F. R. CLARKE, Principal.**

A Practical Business Training School for the Young  
and Middle Aged of both sexes. Open day and even-  
ing throughout the Year. Tuition less than one  
half usual rates. Excellent board \$10 per month.

**COURSES OF STUDY:**  
Full Business Course, Full Normal Course,  
Teacher's Course, Review Course,  
Academic Course, Special Courses,  
Languages, Telegraphy

The College Journal, containing full particulars  
sent postpaid. Address: F. R. CLARKE,  
P. O. Box 15, Stockton, Cal.

**THE CALIFORNIA  
POWDER WORKS.**

**Santa Cruz Gunpowder.**



Pacific Rifle and Shot Powder.

**ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
SHOT,  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.**

**1 PRINCIPAL OFFICE,  
No. 230 California Street,  
SAN FRANCISCO, CAL.**

**\$72** A week made at home by the industrious.  
Best business now before the public. Capital  
not needed. We will start you. Men, women,  
boys and girls wanted everywhere to work for us. Now  
is the time. You can work in spare time, or give your  
whole time to the business. Neither business will pay  
you nearly as well. No one can fail to make enormous  
pay, by engaging at once. Costly outfit and terms free.  
Money made fast, easily and honorably. Address:  
THOMAS & CO., Augusta, Maine.

**A GIGANTIC WAREHOUSE.**

The following, from the Contra Costa Gazette,  
concerning the construction of a building nearly  
half a mile in length, near Port Costa, by the ho-  
nanza klugs of the Nevada Bank, will give our  
readers some idea of the capacity of warehouses  
needed for storing grain:

The bare shore line between Martinez and Port  
Costa, which is destined in time to be almost one  
continuous stretch of wharves, warehouses and  
factories, is already beginning to show some of its  
future importance. First came the coal bukkers, a  
large structure situated about a quarter of a mile  
up the shore from Port Costa. Now comes the  
Nevada Bank wharf and warehouses, at the foot of  
Lone Tree valley, about two-thirds the distance  
from Martinez to Port Costa. Temporary build-  
ings were constructed last week for the accommo-  
dation of workmen, and the first pile was driven on  
Monday. The Nevada Bank has secured three  
wharf franchises at the place mentioned and it is  
the intention of the owners to build a wharf 3,000  
feet in length, or about three-fifths of a mile. Up-  
on this wharf will be erected warehouses aggregat-  
ing a length of 2,300 feet, or nearly one-half a  
mile. A warehouse half a mile in length is cer-  
tainly a gigantic building; and when it is con-  
sidered that this one warehouse (for the several  
warehouses, side by side, may be said to be really  
but one long warehouse) will be but one of the  
many to be built in the next two years, some idea  
may be obtained of the immense traffic in grain  
of which this county is to be the center. The Ne-  
vada Bank warehouses will have a capacity of 60,  
000 tons. The wharf will be built in a curve, par-  
allel with the railroad company's right of way, and  
will have a frontage on six fathoms of water.  
There is, at present, but one pile driver at work,  
but there will be shortly three—two floating and  
one on trucks. It is probable that the space be-  
neath the warehouses will be filled in and a con-  
crete foundation laid. The buildings will be com-  
pleted by July, in time for the first shipments of  
the coming crop. The Nevada Bank loans large  
sums of money on grain, and these warehouses will  
be used more particularly for the storage of wheat  
and barley upon which money has been loaned.  
It will doubtless not be long before other ware-  
houses are constructed along the shore, and Mar-  
tinez, Port Costa and Crockett will be eventually  
connected by a continuous line of wharves.

**TIMBER CULTURE.**

Here is a terse, timely and entirely practical  
suggestion from a contemporary, which we de-  
sire to indorse, reinforce and make applicable to  
Los Angeles county. It is from the Ventura  
Free Press:

"Can't every farmer in the county, some  
Saturday afternoon, when the horses are pret-  
tily tired of dragging the gang plow, give them a  
rest, and with all his men devote three or four  
hours to tree-planting? Any trees—locust,  
walnut, cypress, blue gum—anything to break  
the monotony of the landscape and make it  
beautiful, besides furnishing fence-posts and  
firewood in the near future. Do this, and  
within two years you will thank us heartily  
for the advice."

If such a practice were energetically inau-  
gurated and energetically kept up, at proper  
seasons, for a few years, the whole surface of  
our treeless country would be transformed.  
The culture of timber would be followed not  
only by the good results pointed out, but it  
would have a large influence in warding off  
drouths and in protecting the sources and pre-  
serving intact the volume of our streams,  
which supply the life-blood to our soils and  
make cultivation possible where otherwise  
only an arid desert would stretch its repellant  
wastes. Let the spirit of tree-planting and  
timber-culture once take full and complete  
possession of our farmers and rancheros of  
the south country, and the good that would  
follow to individuals and the public in half a  
decade would be simply incalculable and im-  
measurable.—Los Angeles Mirror.

**DEEP PLOWING**

Messrs. George and Charles Cadawader, cap-  
italists, says the Willows Journal, who own a  
large tract of land about five miles south of  
Willows, east of the railroad, have recently  
put in operation on their farm a plow that  
seems to do pretty good work. It plows about  
a foot deep. Some of this land is fractured  
with alkali, but the deep plowing has de-  
veloped the fact that the alkali does not extend  
much beyond the surface, first-class loamy soil  
being thrown up by the plow. It is the opin-  
ion of some that the alkali can be worked out  
of this land with the plow. At least it can be  
so mixed in with the good soil that it will not  
prove such an obstacle to the growth of vege-  
tation upon it as it has heretofore proved to be.

**SUB-IRRIGATION.**

The following we find in the San Luis Obispo  
Tribune:

This system of sub-irrigation has been advocated  
by the most skillful and scientific agriculturists in  
this country and Europe for some years past, and  
the success which has followed the trials has placed  
the system beyond the rank of experiment. G. G.  
Biggs, the most successful horticulturist in Califor-  
nia, tried the plan in an orchard of 150 acres in  
Solano county, and says that the product was so in-  
creased in quantity and quality as to pay the cost of  
the improvement in one year. E. W. Steele, of  
Corral de Piedra rancho, one of the most enterpris-  
ing agriculturists of the State, is now introducing  
the system in his garden and lawn about his resi-  
dence. Trenches, from sixteen to eighteen inches  
in depth, are dug at intervals of seven feet, and as  
long as required, to cross the piece of land to be  
irrigated, and in these cement pipe, four inches in  
diameter, and of two inch upon bore, is laid by  
a machine carried along by hand, making the pipe  
continuous, like a gigantic sausage. While the  
cement is still soft, holes are punctured in the pipe,  
at intervals of seven feet, and in each of these  
a perforated plug is inserted, through which the  
water, when let into the pipes, will percolate and  
irrigate the ground. To protect these plugs from  
becoming stopped by the overlying soil, a cement  
cap is placed over each in such a manner that the  
water may always flow freely. These pipes connect  
with a main trunk, of four or six inches in diameter,  
through which the supply of water runs. The pipe  
of various sizes is made on the place at a small cost,  
and, when dry and set, becomes as hard as stone,  
and strong enough to hold a column of water of 50  
feet pressure. Large cisterns, distributing boxes,  
drain and sewer pipes have been made of the same,  
and most admirably answer the purposes. Mr.  
Steele has a perennial stream running through his  
place, and this he will turn into his underground  
pipes. However dry the season may be, there will  
be no scarcity of vegetables, fruit, or flowers about  
the pleasant home, and the grassy lawn will always  
be kept green.

**Fears concerning crops.**

A writer in the Marysville Appeal, who has had a  
large experience in raising crops in several sections  
of California, thus expresses himself in regard to  
the fears that are annually expressed, concerning  
crop prospects:

Since wheat-growing became a great industry in  
California, there has probably not been a single  
season in which a greater or less number of people  
did not find occasion to express "fears as to the  
condition of the crops." If the winter be wet,  
"fears are expressed" that it will prove too wet;  
and if the winter be dry, then "fears are ex-  
pressed" that it will prove too dry. If the season be  
a happy medium between wet and dry, then some  
"fears are expressed" of drought, and other "fears  
are expressed" of too much wet, according to the  
fancy and the temperament of the persons express-  
ing the "fears." One thing is always certain; it is  
that "fears" of some kind are always entertained,  
in regard to the condition of any growing crop in  
California. "Fearing" has grown to be a custom  
of the California agriculturist. Ranching in this  
State allows considerable leisure after the seed is  
put in the ground and winter plowing done, and  
the interval of leisure between seed-time and har-  
vest is always more or less occupied by entertaining  
"fears." In the winter season the rancher who  
prays is either praying for more rain or for alet up,  
while the rancher who "cusses" is "cussing" either  
the dryness or wetness of the weather. These re-  
marks, of course, are not intended to apply to the  
farmers in Yuba and Sutter counties, where  
drought is a never known, but yet, even in this  
favored section, a few chronic "fearers" may, per-  
haps, be found.

**APPEARANCES IN THE COUNTY.**

The editor of the Santa Barbara Press thus de-  
scribes, briefly, what came under his observation  
during a recent visit through a portion of his  
county:

A most delightful trip recently up through the  
Goleta showed the country to be flourishing. The  
crops are all looking well and the soil is mellow  
and in fine condition. There is considerable good  
pasture, and wheat and barley promise very en-  
couraging crops. Col. Hollister's ranch is in ex-  
cellent condition. The 45 men employed, under the  
supervision of the proprietor and Mr. James, per-  
mit no weeds to find growth there, or no spot to re-  
main uncultivated. The Colonel has cut down the  
line of gum and eypress trees that stood in front  
of his house, obstructing his view of the ocean.  
This has improved appearances very much. The  
late cold weather has injured the lime trees. Only  
one or two remain on the place in healthy condi-  
tion, and these only where they were protected.  
Many of the almond trees are being cut down also,  
giving more room to the walnuts. The orange  
and lemon trees are in splendid condition. The  
trees are very heavily loaded, and the fruit is im-  
proving in flavor. They will commence picking in  
about two months, as the crop is later this year  
than usual.



## GILROY PEARS.

From the Gilroy Advocate, we take the following items:

The first Eastern shipment of pears from Gilroy was made in 1878. The purchase was made from our local orchardists, through the agency of Horner Willson, for the firm of A. Lusk & Co., San Francisco. In the following year, 1879, the pear crop was a failure. Porter Bros., of Chicago, bought, through Mr. Willson, in 1880, about 600 boxes; in 1881, over 700, and in 1882, within the past few months, 800 boxes. Porter Bros. have also purchased, through George Wentz and W. Wall, about 300 boxes, and other parties have shipped about 300 more. From 300 to 400 boxes of Bartlett pears have also been shipped to San Francisco and San Jose canneries, making the total surplus crop for home and Eastern markets, nearly 2,000 boxes. From the foregoing it will be seen that the pear crop is increasing annually. All these pears were grown in Gilroy, San Felipe, and San Juan, places which appear to be specially adapted to their cultivation. The pear will flourish whether the water is near or far off from the surface. On wet land the apple tree dies in a few years, or becomes worthless. On dry land it lives longer, but the fruit is small and tasteless, and, we may add, worthless. But the pear tree will bear good fruit, under the same conditions, and its market price will average three times more than the apple. If the price and demand in the future should be equal to the present, the pear is the most profitable fruit to raise in Gilroy and vicinity. Of the winter varieties, the Winter Nellis and the Esler Beurre take the lead. The Bartlett and Beurre Hardy are the leading fall pears. Mr. Willson says: "In my humble opinion, the Gilroy fruit is as good as any, if not the best, grown in California; but," he adds, "many orchards are worthless, because of the starvation disease. Trees require food as well as animals, therefore wash and manure them well, and your return will be an hundred fold."

## COPPER MINING.

A correspondent of the *Bulletin* of this city, makes the following reference in regard to the copper mine at Spenceville, in Nevada county:

About twenty years ago considerable attention was paid to copper mining in California. The business, however, was never advanced beyond the first stages of production. No attempt was made to reduce the ores, and so get a merchantable article for shipment and home use. The ore was taken out and sent to this city, at considerable expense, and then shipped to Boston and Swansea for reduction. The business, as then carried on, was abandoned long ago. Within a few years, a copper claim in Nevada county has been worked, with a fair degree of success, but nothing beyond copper cement has been produced there. This cement is shipped by railroad to New York and Baltimore, where it finds ready sale. Last year this mine paid its first dividend, at the rate of five cents per share, or \$2,500. The Company paid six of these dividends between March 1, and September 1, 1882. There were no dividends paid in the last four months of 1882. The seventh dividend, of the same amount, was paid this month. This is the only copper mine now in operation in the State, of which we have any knowledge. There is one in Arizona that did well last year, and another, in the same Territory, promises well this year.

## NEW ENTERPRISES.

The Rohnerville Herald, Humboldt county, is of the opinion that prosperous times are close at hand, for Eel river people. It says: "When the railroads are commenced, affording employment for every idle man and team in this portion of the county; when a branch road winds its way along the meanderings of Strong's creek, into the immense belt of timber which lies east and south of Felt's Springs, and a saw-mill, with a cutting capacity of 100,000 feet a day, is in motion, Rohnerville will assume the importance to which she is entitled by location and the resources which surround her. The time has arrived when our people should, by every means in their power, encourage and foster every enterprise within their reach. Don't wait for everything to come which we are by nature entitled to. Help them to come, by every honorable inducement."

SUBSCRIBE FOR THE RESOURCES OF CALIFORNIA.

## A WONDERFUL VINE.

Charles Dondero, 535 Washington street, San Francisco, has received two large packages of valuable seed from the Department of Agriculture at Saigon, Cochinchina, which may prove its excellence for adaptability to our soil. The seeds are that of a tuberous annual vine which has been discovered in the wilderness of Cochinchina, and its cultivation is rapidly becoming general in that country, both for table and wine purposes. The berries equal, it is said, in size, taste, and flavor, the best Burgundy grape known. It contains about the same percentage of alcohol as the native Bordeaux. The wine from it is said to be delicious, and the fruit refreshing and nutritious. The plant dies annually, but produces itself from the tuber. The germination of the seed requires from two to three months. It can be done in pots. This vine is cultivated exactly as our Lima bean is. It needs stakes to sustain it, just as our grapevine does. The vine delights in a warm, light soil, particularly in moist regions. The tuber is protected from winter frosts by covering it with straw, or manure. This vine is not only easily propagated by seed, but still more by shoots, of which the tuber produces many. These are carefully separated from the mother stock, with one or two of the many roots, and planted. This operation, which can be performed by any ordinary laborer, strengthens the mother plant, preparatory to its crop of fruit, and furnishes all the cuttings the vineyardist may wish to set. The great productiveness of this vine may be judged by the fact that, in ordinary seasons, in its native country, each vine bears from 180 to 250 pounds of the grapes, in clusters from three to nine pounds each, the season being from June to the middle of November. Mr. Dondero will furnish, we understand, the valuable seed to those who may wish to give it a fair trial, in the interest of the State. There is no doubt that the tuberous vine can be cultivated advantageously, with proper care at the beginning, in nearly all the wine counties of California.—*St. Helena Star*.

## A RICH FIND.

Considerable excitement has been created in the vicinity of Yorkville, in this county, by the reported discovery of a rich silver ledge on the ranch known as "Dutch Lowery's" where J. S. Cox and a force of six men are at present delving away, running a tunnel into the mountain side. The discovery is said to have been made several months ago, but the secret was kept by the few until quite recently, when the work being carried on now was commenced. The tunnel has already been run in some 20 feet, and a well-defined ledge struck, and the finding of the ledge so soon, and at so short a distance from the entrance, together with the rich appearance of the rock taken out, has produced more excitement and talk in that usually quiet neighborhood than was ever known theretofore. If the reports coming from there are but half true, Mendocino will soon be known as a silver-bearing county, and her wealth and resources will be estimated far in excess of what she can now boast. For the good of all concerned, we trust the new mining district will be developed as one of the richest ever discovered.—*Mendocino Dispatch*.

## RAPID IMPROVEMENT.

The Fresno Republica says: Five years ago Fresno was just beginning to be talked of as a place of possible importance. Fruit and vine culture were yet an almost untried experiment. To-day Fresno is known in every hamlet in the State. Her cheap wooden buildings are rapidly giving way to massive and elegant brick blocks, and fine and elegant residences are taking the place of small, temporary buildings. Her fruit and vine interests have grown to immense proportions. The signs of prosperity and vigorous growth are visible on every hand. This rapid development has exceeded the expectations of the most sanguine. The possibilities of the future are now rated much higher than they were five years ago, but we believe that developments of the next five years will be a greater surprise than those of the past. They will be of such vast proportions that those who contemplate them most closely can now hardly realize them.

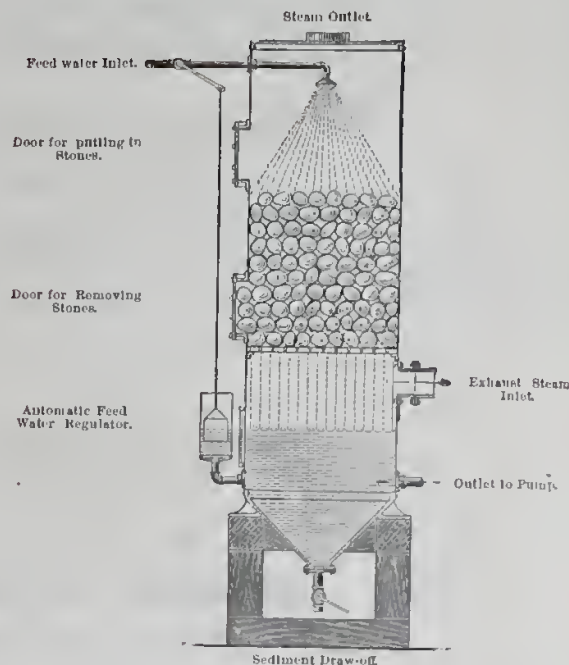
## NOT OVERDONE.

There is no reason to suppose that fruits are being overdone in California, if orchardists will raise only the best varieties and pickers will do their part in regard to selection of material, care in preparation and give full weight. Prices, it is true, may fall somewhat, but every reduction in price will increase the demand, by bringing out canned fruits within the ordinary reach of millions of families in this and other countries, who now look upon them as luxuries, but if they were a little cheaper would use them as staples.—*S. F. Merchant*.

## LLEWELLYN FILTER-HEATER,

Patent Issued Aug. 12, 1879, Re-issued Aug. 16, 1881.

For the Prevention and Removal of

STEAM BOILER INCRUSTATIONS  
WITHOUT THE AID OF CHEMICALS.

Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.

Further particulars with full descriptive circular and price list can be obtained at the office of the

LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufactory, Columbia Foundry, 133 and 135 Hyde Street.

## The California Lloyds

## UNION

## INSURANCE COMPANY

OF CALIFORNIA.

THE CALIFORNIA LLOYDS

(Established in 1861).

## FIRE AND MARINE

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 476 and 418 California St.

Agencies in all the Principal Cities of the United States.

G. TOUCHARD, President. | N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary

O. P. FARNFIELD, General Agent

GEORGE T. BOHEN, Surveyor

J. F. FARNSWORTH, M. T. BRAWER

M. T. BREWER & CO.,

Nos. 30 and 32 J Street,

SACRAMENTO, - - CALIFORNIA.

COMMISSION MERCHANTS & WHOLESALE DEALERS IN Foreign and Domestic Green and Dried Fruits, Produce, Honey, Nuts, Garden and Flower Seeds. Please give us a trial. 30 and 32 J Street, Sacramento, Cal.

**WISE** people are always on the lookout for means to increase their earnings, and in this become wealthy; those who do not offer a chance to make money rapidly. Any one can do the work properly from the first start. The business will pay more than ten times ordinary wages. Expensive outfit furnished free. No one who engages fails to make money rapidly. You can devote your whole time to the work, or only spare moments. Full information and all that is needed sent free. Address, Branson & Co., Portland, Maine

## DO YOU ADVERTISE!

Do you wish to advertise to the amount of a few dollars only? Apply to us, and we will inform you how you can invest the amount most judiciously.

## WE WILL TELL YOU HOW.

If you wish advice or information on the subject, we shall be glad to communicate with you and endeavor to give you satisfaction.

## YOU CAN SAVE MONEY.

Do you wish to advertise extensively? Send a concise statement of what you wish to do, and await our estimate before giving out the order.

## TIME.

Have you a list of papers in which you find it pays you well to advertise? Send your list and advertisement to us. By so doing, you can save expense, time, and the trouble of attending to the business.

## ANNOYANCE.

Does it give you trouble to look after the advertisements in each particular paper? Let us do your business, and we examine every paper, and see that every insertion is properly given and all omissions made good.

## AND HAVE YOUR WORK DONE

Is your credit so well established that you can secure very low rates by trading direct with publishers? If so, we want your business, and will procure you equally low rates.

## CHEAPER.

If you do much or little, we shall be glad to do it for you, and give you every advantage which our experience of seventeen years enables us to offer.

## BETTER.

Do you find it difficult to get exactly what you want? Write us in detail just what you will require and see if we do not give you satisfaction.

## AND MORE PROMPTLY.

Are you annoyed by needless delays? We promise you they shall not occur if you trade with us. We always send out all orders and check all papers the day they are received.

## BY SENDING YOUR ORDERS TO

If you want the most extensive advertising, we can give you the papers best to do it in. If you want the cheapest, we can do the same, and in either case it will pay you to write to us.

OEO. P. ROWELL & CO.,

If you live here or come to our city, we shall be glad to have you call at our office, whether you are ready to advertise or not.

## NEWSPAPER ADVERTISING BUREAU.

We have an entire building of our own, we keep all the newspapers on file, and shall take pleasure in showing you how we do our work. If you can't come, write for our circular and catalogue, which will be sent free.

NO. 10 SPRUCE ST., NEW YORK.



## FIRE AND MARINE

## INSURANCE AGENCY

OF

HUTCHINSON

&amp; MANN,

Nos. 322 and 324 California Street  
and 302 and 304 Sansome Street,

San Francisco.

Agents for The

Agricultural Insurance Co. .... New York,  
\$1,521,630.Confiance Ins. Co. .... Paris, France,  
\$6,835,298.Fire Ins. Ass'n (Limited) .... London, Eng.,  
\$1,573,291.Glard Insurance Company ..... Philadelphia,  
\$1,208,645.New Orleans Ins. Ass'n ..... New Orleans,  
\$573,216.St. Paul F. & M. Ins. Co. .... St. Paul, Minn.,  
\$1,048,673.Standard Fire Office (Limited) London, Eng.,  
\$1,300,000.Tentonia Ins. Co. .... New Orleans,  
\$418,045.

## MARINE.

The London and Provincial Marine Insurance Company ..... London,  
\$6,278,362.La Foulere Marine Ins. Co. .... Paris,  
\$2,250,000.

Capital Represented. . . \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. L. CHALMERS,

Special Agent and Adjuster.

F. P. BACON, Pres. C. L. FOUTS, Sec.

## THE

Globe Iron Works Co.

FOUNDRY,

MACHINE SHOP,

and FORGE.

Manufacturers and Repairers of all Kinds of

MACHINERY AND IRON CASTINGS,

Hoisting and

Mining Machinery.

LOCOMOTIVES.

Portable, Stationary and  
Marine Engines.BISHOP'S ECONOMICAL MINING  
PUMP APPARATUS,Which does away with Cumbersome Pump  
Boils, V Boils and Balance Boils, operating  
equally well in shafts or inclines, admitting  
of deflection into distant workings. Circu-  
lars furnished free, upon application.

AND

MINING HORSE-POWER AND  
QUICKSILVER FEEDERS.

SPECIALTIES.

PATENT AIR COMPRESSORS.

222 and 224 Fremont St.,

Between Howard and Polson

San Francisco

JAMES G. STEELE &amp; CO.,

Druggists and Manufac-  
turing Chemists,RESPECTFULLY CALL ATTENTION TO  
THEIR NEW ARRIVALS OFForeign Perfumery, Colognes, Scented  
Toilet Soaps, Hair, Tooth and Nail  
Brushes, Combs, Hair Oils, Pomades, Face  
Powders and Cosmetics, Sponges,  
Patent Medicines, Etc., Etc.

JAMES C. STEELE &amp; CO.'S

Palace Drug Store,

PALACE HOTEL.

635 Market Street, - - SAN FRANCISCO.

W. T. CARRATT'S

BRASS AND BELL FOUNDRY.

SAN FRANCISCO.

MANUFACTURER AND IMPORTER OF

Church and Steamboat BELLS and GONGS

BRASS CASTINGS of all kinds,  
WATER GATES, GAS GATES,  
FIRE HYDRANTS,  
DOCK HYDRANTS,  
GARDEN HYDRANTS.

A GENERAL ASSORTMENT OF ENGINEERS' FINDINGS



Root's Blast Blowers.

For Ventilating Mines and for Smelting Works.

HYDRAULIC PIPES AND NOZZLES.

For Mining Purposes.

GARRATT'S IMPROVED JOURNAL METAL

—IMPORTED BY—

IRON PIPE AND MALLEABLE IRON FITTING

ALL KINDS OF

SHIP WORK &amp; COMPOSITION NAILS

AT LOWEST RATES.

THOS. PRICE'S

ASSAY OFFICE

AND CHEMICAL LABORATORY,

524 Sacramento Street, San Francisco.

DEPOSITS OF BULLION RECEIVED, MELTED  
into bars, and returned made in from twenty-four  
to forty-eight hours.Bullion can be forwarded to this office from any part  
of the interior by express, and returns made in the  
same manner.Careful Analyses made of ores, metals, soils, waters,  
industrial products, etc. Mines examined and reported  
upon. Consultations on chemical and metallurgical  
questions.REST  
not life is sweeter by, go and dare be-  
fore you die, something mighty and sub-  
lime leave behind to conquer time. "All  
things come to an end." Everything new. Capital not required. We will fur-  
nish you everything. Many are making fortunes. La-  
dies make as much as men, and boys and girls make  
great pay. Reader, if you want business at which you  
can make great pay all the time, write for particulars to  
H. HALLATT & Co., Portland, Maine.

## THE ANGORA INDUSTRY.

We had a call, the other day, from Mr. Nathan Gilmore, of El Dorado county, who has long been known as a breeder of Angoras. Mr. Gilmore believes that the goat business is promising much more than for some time. Although the price is low, there is a ready demand for all the mohair. There has been a period of depression, but it is now improving. The same rule holds in this industry as in all others. Mr. Gilmore emphasizes the need of using first-class animals as breeders. In the breeding of all animals you will find inferior ones being produced. Why should goats be any exception? The same rule must apply to the breeding of goats as to other animals. There has been enough mistakes made about goats. I have always taken the motto that in this, as in all other breeding, "like begets like." If you want to get a high standard, you must use a high standard, of course rejecting inferior individuals, even though their pedigrees were good. Nineteen-twentieths of the men who have been breeding goats, having been using poor bucks, the result is, they have produced more hair, rather than mohair.

Mr. Gilmore informs us that his fleece last year was sold all together for 47½ cents apound, without any selections. He shipped off last 2,000 lbs., and no division in the grade. Three years ago he wrote to Kitching Brothers, and they said that if he had anything, to keep it; that they had 30,000 lbs. in their warehouses. Now they have not a pound. The price is not large, yet there is an actual demand for it. Mr. Gilmore has just received a letter from Kitching Bros., New York, saying that they are out of stock of mohair, and that consignments will sell readily.

Mr. Gilmore states that, notwithstanding everything has been said to discourage the business, it has been still going on and getting a foothold, and he expects that, when the price comes up for mohair, a good deal of mohair will find its way out. Pelts have averaged about 60 cents apiece. The receipts in the county of El Dorado, from pelts, mutton and mohair, have amounted to \$25. It has been scattered among a great many people, and the money has been quite a help with the return from other crops. He believes that, considering the number of goats that have been imported to this coast, and the bands they have been thrown into there is no interest that has made more rapid strides than the Angora industry, and it bids fair now to be heard from, in a very satisfactory way.—*Rural Press.*

## DRY SEASON.

There is much talk about a dry season, and much doleful speculation is indulged in, especially by constitutional croakers, who afflict every community. As a matter of fact, the Santa Ana valley is much better prepared to withstand a dry season than most other portions of the State. A scanty rainfall means short crops of hay and barley upon our mesa lands, and this is the main extent of the actual damage to crops. We shall have a much larger orange crop than last year, estimated as high as 50,000 boxes, worth at least \$70,000. Let us say we pack as many boxes of rusins as we did last year (and the probability is that it will be much larger), they will be worth at least \$30,000. Lemons and limes, say \$2,500. Wine grapes, lemons and brandy, say \$12,000, which, we think, is a low estimate. Hogs, \$75,000; hops, \$25,000; eggs, \$22,000; corn, \$40,000; potatoes, \$6,000; fruits, \$5,000. There will be no failure of any of the above products, on account of the limited rainfall. There are numerous other productions and articles of export which we have not mentioned, which will swell the grand total to at least the figures of last year, which we took pains to gather carefully from reliable merchants. In round numbers the figures were half a million dollars. Let us hear no more dismal croakings about a dry season.—*Santa Ana Herald.*

## FRUIT GROWING.

The Stanislaus county News says: It has been generally believed fruits and vines had to be irrigated. Experiments teach that this is not necessary in the rich bottoms of the Stanislaus, Tuolumne and San Joaquin rivers. Mr. Stephen Rogers, an enterprising farmer, is putting out an orchard and vineyard. He has already 14,000 young trees growing in a very healthy condition. He will add about 2,000 more this year. He grows his own seedlings and does his own grafting so he is certain to have the very best varieties and most healthy vines. He will this season put out 10,000 vines. His experiments tend to show that grapes growing entirely too thrifty on the first bottom but that the second would be better. He measured one vine that grew 21 feet in one season. He intends to increase his orchard and vineyard until each cover 100 acres.

## A BUSY TOWN.

The editor of the Dixon Tribune thus speaks of the town of Winters, Yolo county, its business outlook and future promise:

Being called to Winters on some business matters during the early part of the week, we took occasion to converse freely with the business men, concerning the future prospects of the place, and, without exception, found them exceedingly hopeful. It is a pretty village, of some 600 or 700 inhabitants, beautifully located, in one of the healthiest and most fertile sections in the State. As our readers are all aware, Putah creek is the northern boundary of Solano county. Winters is situated on the northern bank of Putah, and, although a part of Yolo county, it is firmly wedded to Solano county, not only in point of business interests, but the population is in a great measure made up of old Solanians, who cast their fate with the new town upon its very first inception, and who are still loyally clinging to its fortunes, with firm and unshaken faith in its future. The country surrounding Winters, is justly classed among the most fertile and productive in California. There are several large and productive orchards and vineyards in the vicinity. The first vegetables in the market are shipped from this point, and the wheat yield is something marvelous. It is also in the very heart of one of the best stock ranges in the State, so that the natural resources of Winters can truly be said to be very great. An idea of the estimate placed upon land for farming purposes can be formed from the fact that on the day of our visit, Mrs. Rameay, formerly of Green valley, took possession of a farm for which she paid at the rate of \$175 per acre. The people of Winters also have great faith in the ultimate construction of a railroad through Putah canyon into Napa and Lake counties. Surveyors are now in the field, and if this route is finally determined upon, there is no question but that Winters is destined to become a town of great importance. The business men of the place are displaying considerable activity. We noted many improvements now in progress, and many more are contemplated if the season proves favorable. The main streets have been graded and graveled, and shade and ornamental trees are rapidly springing up.

## SANTA CLARA VALLEY.

In every direction in this valley may be seen the results of cutting up the small farms. Hundreds of homes have already been made on five to twenty acres of land, and this year the process of subdivision is going on more rapidly than ever. At every turn trees are being planted, wells are being bored and preparations made for more new homes. And this is the right use for such a valley as this. It was made for the purpose of providing healthful homes for people of education and refinement. Its fruit trees and vines can be cultivated without much hard labor, and these products can be made to maintain their owners in comfort and independence. It is not too much to say that ten acres of land in this valley, well cared for, will yield as much actual profit as a hundred acres in most other parts of the world. And the work and expense of caring for the one is really but a little more than a tenth part of what is required of the other.

These facts are becoming known in all parts of the country, and thrifty citizens are flocking hither to escape from the dreary routine of hard labor in the Eastern States, to the comparative ease and independence offered here. People of intelligence also desire to escape the Arctic rigors of the winter, and the equally disagreeable and debilitating effects of the hot summer. And every one that comes sends for his friends and neighbors. There is no dissatisfaction, and indeed he must be blind to please who is not suited with the conditions of life here. Of course there are few chances to make fortunes, but wise men know that money is in no sense to be compared with health and comfort, and they make their arrangements accordingly.—*San Jose Herald.*

## THE DANGER IS SMALL.

The Los Angeles Express says: In the course of twenty years there has been only one really disastrous season in the county. In the main its crops are assured. Our vast wine and fruit interests are as our absolute safety as can be, for the vineyards and orchard are irrigated. Much of our land is damp enough, independent of rain, where alfalfa is a sure crop and dairies are like a gold mine. Our mesas only suffer in our partially dry seasons, and we can stand one dry in twenty. Ten inches of rain, owing to our peculiar soil and climate, if it comes at proper seasons, will mature a crop of grain and grass. This is the only thing with us ever in jeopardy, and the danger is small.



## SEMI-TROPIC PRODUCTS.

The Los Angeles Express of January 10th, had the following interesting items:

The outcome for the current crop year of three Southern California products will show some of the sources of our prosperity and the foundation on which our future is based. First, of oranges this region will send to market from January 15th to June 1st, 1883, not less than 200,000 boxes. The sum may reach 250,000 boxes. These sell at from \$1 to \$4 per box.

Next of raisins. The crop is estimated at 100,000 boxes for last year, and sold at \$1.75 to \$2 per box. This crop is steadily increasing.

The third item taken is wine. The following table gives the output for last year:

	Gallons.
Anaheim	775,000
Santa Ana	100,000
San Gabriel Winery	250,000
Cucamonga	100,000
San Bernardino	150,000
G. Dalton	10,000
T. Leahy	35,000
Valla	45,000
Naud, Weyse & Co.	150,000
Kohler & Frohling	500,000
Stern & Rose	600,000
E. J. Baldwin	20,000
J. Ramirez	10,000
W. H. Workman	35,000
J. Moran	10,000
J. A. Barrows	15,000
Mrs. Muller	15,000
Tononi	45,000
J. Kiefer	15,000
D. Mahlscheid	15,000
Total	2,895,000

There are besides the above many small wine makers who do not appear here. These would materially increase the aggregate. There will be distilled not less than half a million gallons of brandy which will consume two and a half million gallons of wine.

These three industries are still in their infancy. Each year will make a large increase in each product. These are only three of all the rich products of our soil. The world might be challenged to show an area so prolific, so varied in its capabilities, so mild in climate and so certain of its crops.

## FRUIT CANNING.

Few people have a correct idea of the magnitude of the fruit canning business in California. In value it will soon equal that of the cereal production. Last year the fruit trade of the State reached the enormous sum of eight millions of dollars, or nearly forty per cent. of the value of the wheat crop, and about fifty per cent. of the entire production of the gold mines. The yield of precious metals is diminishing every year, while the grain and fruit yields are increasing. It is to the products of the soil and manufacturing industries that California must look for her future wealth. The grain-producing capabilities of the State are known, but its fruit growing possibilities are as yet only partially comprehended. The investment of capital in fruit-canning establishments, in various localities, is having the effect of encouraging fruit-growing ventures. Many farmers have discovered, and many more are coming to the conclusion that there is much more profit in an acre of orchard or vineyard than there is in several acres of grain. Although fruit-raising is only on the threshold of development, last year's marketed product is worth eight millions of dollars! What it will be in the course of another decade remains for the future to reveal.—Stockton Independent.

## ORANGE SHIPMENT.

As showing the growth of the orange business in the Santa Ana valley, we will state that in 1878-9 the shipment by rail consisted of 454 boxes, weighing 31,152 pounds; 1879-80, 1,623 boxes, 107,407 pounds; 1881-82, 20,000 boxes, and for 1882-83, the estimate is 30,000 boxes at least. It is probable that the estimate will be largely exceeded, as the trees are bearing heavily this season. It was calculated by those competent to judge, that the orchardists of the Santa Ana valley received about \$40,000 for their fruit last season. These figures show how astonishing has been the growth of orange culture in our valley, and thousands of trees will come into bearing in a short time.

The bulk of the oranges raised in the Santa Ana valley are of good size and quality, and will command good prices in all markets.—Santa Ana Herald.

## A GOOD WORD FOR BUTTE COUNTY.

The following is from a late issue of the Sutter county Farmer:

Sutter county yields the crown of excellence to no county in the State, but she accords to Butte her justly earned praise for her good people, and her valuable and productive agricultural lands. We may look the State over, and nowhere can be found better land, better soil, and better climate than in Butte county. The fruit of every climate grows to perfection within her boundaries. Her grain fields are unequalled, and her people are open-hearted and generous to a fault. We were led to these reflections by actual experience on our visit to Chico, (the Gem of the North), a month ago. At that time her early-sown grain fields had already turned green, and the farmers were busily engaged in turning up the deep, black soil, to be sown to grain. Our party, Judge Messick, I. N. Hoag, of Sacramento, and the writer were the guests of General John Bidwell and his estimable wife, and while there we were permitted to see the magnificent farm of the General. We have neither the ability nor the space to say what we wish, concerning this immense farm. To be appreciated, it must be seen. It had been eleven years since we saw Chico; in that time it had grown from a little village to a city of at least 5,000 inhabitants. She has graveled streets, and several pure, crystal streams flowing through her town, or on her borders. Her people are engaged in many and various business pursuits, and also in manufactures. She supports three daily newspapers, and several weeklies. There is visible, on all sides, an air of contentment.

## FRUIT CULTURE.

The supply of California raisins last year was of excellent quality, while the quantity would have been very large, but that a great deal were destroyed by rains while curing. As usual, early in the year, the most exaggerated estimates were made of the crop.

The following table shows the number of boxes of California raisins manufactured during the past seven years: 1876, 40,000 boxes; 1877, 25,000; 1878, 70,000; 1879, 70,000; 1880, 70,000; 1881, 95,000; 1882, 100,000.

The increase in production is not so great as many would desire, but it is large enough for the present. It is better to go slowly, and have all that we send to market of a uniformly good quality. The importation of foreign raisins this year, as all others, show a decided falling off. On the other hand, there has been a considerable increase in the imports of currants, grapes, and citrons. Large quantities of walnuts go east, but there has been no movement in particular of almonds, of which there has been more than the demand. Prunings have been short. Profits have, in many instances, been light.

G. W. Meade & Co. estimated the product of California of the following lines for 1882: Dried peaches, 800,000 pounds; pears, 100,000; apples, 1,000,000; apricots, 200,000; grapes, 500,000; honey, 1,100,000; walnuts 600,000; almonds, 200,000.

The sale of California dried fruits, raisins, etc., are increasing. The total value for 1882 will reach nearly \$2,000,000. Average prices were: Raisins, \$2 per box; dried peaches, 75c. per lb.; pears, 7c. per lb.; plums, 11c. per lb.; apples, 45c. per lb.; apricots, 12c. per lb.; prunes, 10c. per lb. There has been an improved demand, from all parts of the East, for the dried fruits and raisins of California. Sales are about twenty per cent. in advance of last year.—Santa Ana Herald.

## SONOMA COUNTY'S ADVANTAGES.

In speaking of the destination of intending immigrants the Sonoma Democrat says: We may reasonably calculate that Sonoma county will receive no little attention. Its good location, fine climate, great resources and sensibleness must attract the attention of many strangers. They will see that here is a district of country the fertility of whose soil is unsurpassed, and where there is no failure of crops, and this must bring many among us in search of homes. The reports that we print of the sales of real estate show that property is already changing hands at a lively rate, and, unless we are mistaken, the volume of business in this direction will increase from this time forward. The present is a most auspicious time for large landholders to throw their land on the market in small tracts to suit purchasers, for they will surely be sought after, and nothing will repel immigration except inability to secure such property as desired. Sonoma has but to follow the example of Los Angeles to stand in the front rank as a rich, prosperous and populous county.



## Winter Arrangement.

Commencing Sunday, Oct. 22nd, 1882.

And until further notice, Passenger Trains will leave from, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
6:50 A. M.	San Mateo, Redwood, and Menlo Park.	6:40 A. M.
8:30 A. M.		9:05 A. M.
10:40 A. M.		10:52 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:30 P. M.		6:52 P. M.
8:30 A. M.	Santa Clara, San Jose and Principal Way Stations.	9:05 A. M.
10:40 A. M.		10:52 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:30 P. M.		6:52 P. M.
10:40 A. M.	Gilroy, Fajaro, Castroville, and Monterey.	10:52 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:30 P. M.		6:52 P. M.
10:40 A. M.	Hollister and Tres Pinos.	10:52 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:30 P. M.		6:52 P. M.
10:40 A. M.	Watsonville, Apio, Soquel, and Santa Cruz.	10:52 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:30 P. M.		6:52 P. M.
10:40 A. M.	Salinas, Sotol and Way Stations.	10:52 A. M.
3:30 P. M.		3:57 P. M.
4:30 P. M.		5:04 P. M.
6:30 P. M.		6:52 P. M.

\*Sundays excepted. Sundays only (Sportmen's Train).

Stage connections are made with the 10:40 A. M. Train, except Pescadero Stage via San Mateo, which connects with 8:30 A. M. Train.

## EXCURSION TICKETS

Sold on Saturdays and Sunday mornings—good to return Monday—  
To San Clara or San Jose.....\$2.50  
To Monterey or Santa Cruz.....5.00  
Also to principal points between San Francisco and San Jose.

Ticket Offices.—Passenger Depot, Townsend street and No. 2 New Montgomery street, Palace Hotel.  
A. C. BASSETT, Superintendent.  
H. K. JUDAH, Asst. Pass. & Tkt. Agt.

67 S. F. Atlantic Express Train via Los Angeles, Yuma, etc., leaves San Francisco daily via Oakland Ferry, foot of Market street, at 9:30 A. M.

## OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY FOR JAPAN AND CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 2 P. M.  
YOKOHAMA & HONGKONG

Connecting at Yokohama with Steamers for Shanghai

Will sail from San Francisco.

ARABIC	Tuesday, April 10th.
OCEANIC	Saturday, April 21st.
COPTIC	Thursday, May 3d.
ARABIC	Thursday, June 24th.
OCEANIC	Tuesday, July 10th.
COPTIC	Saturday, July 21st.
ARABIC	Saturday, September 15th.
OCEANIC	Thursday, September 27th.
COPTIC	Thursday, October 11th.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cable plans on exhibition and passage tickets for sale at C. P. H. R. Co.'s General Offices, Room 71, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GED. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 302 Market street, Union Block.

T. H. GOODMAN,  
Gen'l Passenger Agent  
LELAND STANFORD,  
President

## THE NEVADA BANK OF SAN FRANCISCO.

Paid Up Capital.....\$3,000,000  
Reserve (U. S. Bonds).....3,500,000

Agency at New York.....62 Wall Street  
Agency at Virginia, Nevada.

ISSUES COMMERCIAL AND TRAVELERS' Notes and sells Exchange and Telegraphic Transfers

This Bank has Special Facilities for Depositing in Bullion.

SAN FRANCISCO, California.



## QUICK TIME AND CHEAP FARES

FROM

AUSTRALASIA, CHINA & JAPAN,

TO

NEW YORK

AND

LIVERPOOL

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

CENTRAL PACIFIC RAILROAD

CONNECTING WITH

Union Pacific Railway

AT OGDEN, UTAH,

AND

SOUTHERN PACIFIC RAILROAD

CONNECTING WITH

Atchison, Topeka and Santa Fe Railroad,

AT DEMING, NEW MEXICO.

AND THE

Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway Lines to the Eastern States, for all the Cities of the

UNITED STATES AND CANADA.

CONNECTING AT

NEW YORK

With the several Steamer Lines to

England, France.

AND ALL EUROPEAN PORTS.

Silver Palace Sleeping Coaches;

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience in the Passenger while en route—combining the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable cushions, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Patrons. Children under Twelve years of age, Half Price. Under Five years of age, Free. 100 pounds of Baggage per full Passenger free. 50 pounds of Baggage per half Passenger, free.

PRINCIPAL TICKET OFFICE

AT THE

OAKLAND FERRY LANDING.

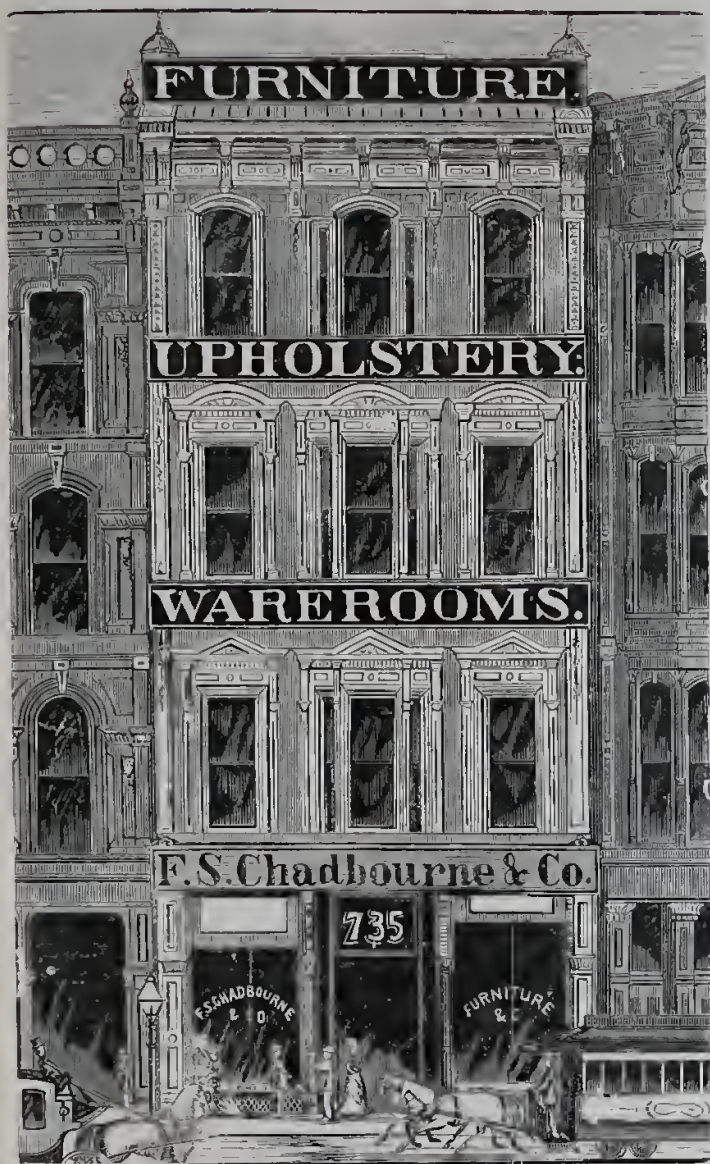
Foot of Market Street, San Francisco. Where passengers, calling in person, can secure choice of routes and sleeping-car accommodations.

A. N. TOWNE, Gen. Superintendent. T. H. GOODMAN, Gen. Pass. & Ticket Agt. SAN FRANCISCO, CAL.



F. S. CHADBOURNE &amp; CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



IMPORTERS, MANUFACTURERS,

• AND—

Wholesale and Retail Dealers in  
**FURNITURE AND BEDDING**  
**OF EVERY DESCRIPTION.**

Chamber, Parlor, Library and Dining  
 Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish

Easy and Lounging Chairs, Etc.—Hotels and Private

Residences Furnished.—Designs Furnished

and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

## VALUABLE LAND.

The *Pomona Times* has the following, regarding the price and productiveness of lands in its immediate section, Los Angeles county:

A young man can make no better start in life than by investing his earnings, whether they be small or great, in real estate. A young man who is the owner of even a few acres of land in Southern California is an independent man, and, by using a little industry and economy, he has a positive assurance of a comfortable income for the remainder of his life. It is not necessary in this country for a man to own an immense domain of land. We know men in this county, who clear every year, from \$1,000 to \$1,600, from ten acres of land. Fruit raising pays even better than that. One of the favorable features of Southern California is that the land is destined to be divided into small tracts. The result will be a larger population, the land will be better cultivated and more highly improved, and will yield from a given area, much larger amount of produce. There are, occasionally, persons who seem to think that \$75 to \$150 and \$200 per acre is too high a price to pay for land. These seemingly high prices have had, and will continue to have the effect of division and settlement of the land in small tracts. We do not, however, consider the prices we have named too high. We believe there is no better investment than land at those prices. The bearing orchards and vineyards of Southern California, when properly taken care of, pay a handsome interest on an investment of \$1,500 to \$2,000 per acre. Land that will do that, or even half so well, and any of the good fruit lands of Southern California will do it, is cheap at the prices we have named. A young man of steady, industrious, and temperate habits, can, in a few years, be the owner of at least ten acres, and with that amount of land he is independent—he will have a good home, a comfortable income, and will thereby feel a greater interest in himself and his country.

## A WOOLEN MILL WANTED.

From the following, which we take from the *Livermore Herald*, it will be seen that a woolen mill in that enterprising town is very much needed:

A small woolen mill, to cost from \$15,000 to \$20,000, would, if properly managed, yield in Livermore Valley, with our cheap fuel, water and transportation, an income to its owners of fully two and a half per cent. per month. In no other place in California could a mill be run as cheaply as here; and nowhere else are the wool-growers themselves so able to build one. The sheep men of Livermore Valley could to-morrow, if they wish, or rather if the matter was placed before them in a proper light, pay into a common fund a sufficient sum to build and equip a woolen mill equal to the needs of this section. All that is needed is that one of their number, in whom they have confidence, and who shall first investigate the matter, go and solicit their subscriptions. The mill should be built by wool men, and controlled by them. By thus controlling every branch, from the production of the wool by their own flocks, from the grass upon their own ranges, to the turning out of the woven cloth, dyed and ready for sale, they could secure for themselves all the profit which is now distributed among half a dozen railroad corporations, and a dozen manufacturers, jobbers and middlemen. There is no reason why the combined wool-growers and manufacturers of Livermore Valley should not themselves secure and retain all these profits. The outlay is not large, the return is certain, and all that is needed is action.

## A FRUIT CANNERY WANTED.

"When will a fruit cannery be established in Visalia?" is a question which has been frequently asked of late. It is a hard conundrum. We give it up. We will answer that a fruit cannery should be established in Visalia this summer. The opening here is a good one, and capital could not be invested to better advantage. Wheat raising will not pay. There is no question about it. Farmers in this county must turn their attention to something else if they hope to pay off mortgages, live comfortably and secure a support for their declining years. When once a cannery is established fruit will be raised. When a local demand is created the supply will be adequate. Irrigation will not of itself remove the troubles of the Tulare county agriculturists. There must be a departure from beaten paths, a sweeping change from the present methods of cultivation, and a substitution of crops which do not depend altogether upon a bountiful supply of water.—*Visalia Delta*.

## AHEAD OF ALFALFA.

Some of our citizens are interesting themselves in the Arabian millet. Extensive planting of the seed is being made in Tulare county upon proof, on the dryest of the soils there, that it surpasses alfalfa. James Morton, of that county, says of it: "We think it is as far ahead of alfalfa as alfalfa is of the wild grasses of California." The roots are known to go down in the earth from five to fifteen feet. The *Los Angeles Times* says of the sample at that office: "It grows to a height of from six to eight feet, resembles the orchard grass in appearance, and is greatly liked by stock of all kinds." The *New York Tropic* says the experiments in New Jersey soil and climate, sowed in May, in drills eighteen inches apart, at the rate of four pounds per acre, in twelve days the plants were up so that he ran a cultivator between the rows, after which no cultivation was possible, owing to the astonishing growth, which crowded down every other vegetation. The first cutting was made July 1st., just 45 days after sowing; it was then seven feet high, covering the whole ground, and weighed, while green, 30 tons to the acre, and dry, six and one-half tons per acre. The second cutting was the 15th of August. Its height was then nine feet, weighing green 55 tons per acre, and dry, eight tons. There has been a positive want, on the part of stock-raisers in the valley, for a grass of something of the character of timothy, to feed at certain seasons alternately with clover. This has been so much a necessity that portions of the farm have been left uncultivated in salt grass, and it seemed that the stock paid more attention to the coarse grass than to the alfalfa. The evergreen millet, from all reliable accounts, is destined to take this place, and this valley should be supplied with it without delay.—*Kern County Gazette*.

## FARMERS' PROSPECTS.

From the following, taken from a late issue of the *Petaluma Courier*, it would seem that farm prospects were never more favorable in that section at this season of the year:

Grain is growing finely. The cold snap was of great benefit to it, as it gave it, by the setback, a heavier root and prevented the tops from growing too fast and rank. We have had for the season nearly 12 inches of rain, and this with the almost constant fogs, have kept the ground in splendid condition. The weather is now as balmy as spring, and since the last warm rains all nature has put on a broad grin. The dairy season is unusually promising. Many of the dairies in Marin county, notwithstanding the long spell of cold weather, are now averaging one pound of butter a day to the cow. Stock of all kinds is generally in better condition than usual for this season of the year. On the Laguna, in Marin county, two or three new hop fields will be planted this spring. Mrs. L. W. Walker is setting out about twenty acres, I. R. Jewell will add about twenty acres to his present field of fifteen acres. Charley Martin will also put out quite a large field. Mr. Pepper, and other nurserymen in this section, inform us that the demand for fruit trees and vines was never so great here as it has been this season. Of many varieties, all the stock suitable for planting has been taken from the nurseries, and they haven't a tree on hand. Farmers have made more improvements on their farms, the past year, than any previous year since our settlement. The whole country bears the appearance of thrift and prosperity, and the general outlook in all this section could not well be more promising.

## POULTRY RAISING.

One of our prominent and successful ranchers has furnished us with the result of his efforts in keeping thoroughbred poultry. From thirty-five hens of the brown and white Leghorn variety he obtained, from January 22d to February 6th, 435 eggs, and the hens are still laying as vigorous as ever. His system of feeding is as follows: Bran stirred up with hot skim milk every morning, wheat in the afternoon, plenty of burnt bones and clean water. He says: "I have tried the scrub, or dung-hill, variety until thoroughly satisfied that they are not worth having around the place. It pays to keep the very best of poultry and live stock, as well as the best of wheat, and many of our farmers would be surprised to see what a good trade can be set by the profits of keeping blooded poultry."—*Gridley Herald*.



## THE CALIFORNIA TROUT.

There are several varieties which go by the name of the California trout. The differences between them are not radical, and arise, probably, from the influence of locality, rather than from natural variation. The differences appear principally in external markings. The fish of highest development are found in the McCloud river, from which they take their distinctive name. They are the true rainbow trout, having a band of bright red, like the iris, along the whole extent of the lateral line. The mountain trout have the same marking, but in fainter tint. In some species it is hardly perceptible. It has been noticed that in wild waters this tint is much more strongly brought out than in fish confined to artificial ponds. Occasionally fish escape from the Calaveras pond to the open stream below. The influence of the wider range and of the change to natural food, largely crustaceans, is observed, not only in the brighter colors, but in the greater vigor and more rapid development of the fish.

In producing and raising from helpless infancy some of the fish tribe, art may surpass nature; but only by a return to the ways of nature at the period when helplessness succeeds helplessness, can the best development come.

The early history of our stock of California trout was given in the commissioner's last report; but the circumstances are of such interest that the story will bear reproduction and continuation.

In 1875 the commissioners received, from a friendly correspondent, 500 eggs of the California mountain trout. In due time these produced 800 fry. They lived and grew to be spawners.

At the age of three years, and when they had reached the average of a pound weight they cast their first spawn. The product was 64,000 eggs. The usual percentage of these hatched, and, with the exception of 17,000, kept for breeders, were distributed throughout the State. In the spring of 1879 there were still living, of the original stock, 260 fish. Having increased in age and size, they gave a larger yield of spawn than in the year previous. Their production in the last-named year was 94,000. Three thousand four hundred of these were retained in the hatchery. The remainder went out for distribution on orders. Our stock of breeding fish of this variety is now 30,000, and the expected yield of fry this year is 3,000,000 to 4,000,000, all of which are already covered by orders, and the cry is still for more.

The spawning season commences about the first of March, and continues till June. They, therefore, afford what the brook trout does not, good autumn fishing.

The California trout is, in its structure, pretty much the counterpart of our brook trout. It has not the carmine spots which distinguish the latter, but has the same dorsal markings, a slightly more forked tail, and the same color and texture of flesh. The general external color is a silvery green or olive, mottled with irregular spots of a black or darkish color. Along the lateral line is, as has been already stated, a marking of red, of varying distinctness, according to habit and habitat.

The fish is one of remarkable vigor and hardness. It will thrive in water which, to salmon and brook trout, would be certain death. It will bear rough handling with comparative impunity, and bruises on its skin, which, in other fish, would be followed by fungus and death, make, apparently, no harmful impression. It is an active fish, and, though it will thrive in either lake or river, loves best a swift-running stream, and the most thoroughly aired water. It is a voracious feeder, but its tastes are as delicate as others of the trout family. It loves best to take its food alive, and cannot resist the temptation of a struggling grasshopper or miller, no matter how full its maw may be already. No fish is so certain as this to be attracted by the artificial fly. It does not matter much what the form or color may be, so that a motion is given to resemble life. In its greed for insect food it takes no account of seasons, and will rise as readily in January to a red fly, when it is hardly possible for a natural fly to exist, as in July, when the surface of the water swarms with insect life. It grows with nearly double the rapidity of the brook trout in the same water, and is, of all fish whose habitat is exclusively in fresh water, the most suitable for the large streams of the State of New York, like the upper Hudson, the Genesee, Mohawk, the East and West Canada creeks, the Moose, Black, and Bear rivers, and all other streams which over-much fishing, dams, saw-mills, and other destructive agencies of human contriving have split for good trout fishing. Whether it can endure the poison of tanneries has not yet been tested. If it shall be found to stand this last desperate test, to which all others of the trout family have succumbed, it will deserve to take rank with the immortals.

The only unfavorable criticism which has been made on this fish is that they are not good keepers; that they rapidly soften after killing, and do not bear transportation well. This may be a disadvantage or an advantage, according to the standpoint from which it is considered. The residents in the neighborhood of trout streams do not care to have all the stock shipped to market; they want some for their own use; and if California trout will not bear

transportation, there will be all the more to eat at home. No fish anywhere or at any time is as good as when fresh caught. The complaint of softness, we think, does not apply to all California trout, but to such as are caught out of season or in very mild waters. The quality of all trout is very much affected by the character of the water in which they live and by what they feed on. Speckled trout caught within a few weeks of spawning time, and after spawning, till they recover vigor, will be slimy and soft and tend quickly to putrefaction, and those that live in shallow water with muddy bottom and feed on leeches and lizards, are never good keepers. Every one who has done much trout fishing will have observed that fish caught in a running stream especially if the stream be one much subject to the influence of rainfalls, soften much more quickly than those taken in lakes. Even on a good spring stream the angler will sometimes observe the ribs of the first trout protruding before the last has been put in his basket. On the other hand, the whole day's fishing on the lake will be smooth and hard. California trout, in this respect, will not differ materially from any other trout.—*Report of New York Fish Commission.*

## PLANTING AN ORCHARD.

The following, by a correspondent of the *Inyo Independent*, contains much valuable information for those who are about starting new fruit orchards:

Fruit culture will be largely increased in this valley, to meet the increasing demand by home and neighboring markets. Having assigned a portion of ground for an orchard in some sheltered place, well protected from the wind, we measure the



ORANGE GROVE IN SAN BERNARDINO.

ground well, and then plough it in; then harrow it down as level as possible. Then mark it off in two directions, so that the intersections of the furrows shall come at the stations for the trees. This is the best way to dig the holes, for the furrows can be made quite deep enough. Indeed, it is not a good plan to set the trees too deep in the ground. I advocate planting on the surface, or as they grow naturally in the nursery. The distance between the trees depends on the variety. Some will require more space than others, but I have always advocated close planting for these reasons: In the first place, it is now conceded that the land appropriated to the orchard should be given up to the trees, and not be used for other crops. Therefore there is less necessity for space between them. In close planting the whole ground is shaded and kept from baking, and thus remains more loose than where exposed. The crowding of the trees also protects them, in a great degree, from severity of the cold in winter, and from the injury incident to the sudden changes in our climate; but in exposed situations this close planting especially shelters them from the trying winds of this valley, and our late frosts in spring. The planting of a fruit tree is the most important part to be observed, and the greatest care should be taken to place the roots in their natural position in the hole, which should be large enough to admit the tree's roots without cramping; then put the surface soil to the floor, and work it in amongst them with the hands, so as to bring it in contact both below and above the roots. When the roots are well covered with soil, then a slight pressure may be made with the foot at the end of the roots. If the ground is dry, it may require a few quarts of water poured upon the roots to settle the soil, and this should be covered with dry earth. All that portion of the tree which was under ground in the nursery must be covered when transplanted. Cultivation should

be kept up in a young orchard for a few years, or until the trees are well established, and begin to cover the ground with their shade. When the spaces between them will be occupied by the branches so as to no longer admit cultivation with the plow, then we have to resort to the spade.

## THE PACIFIC COAST AND ITS SURROUNDINGS.

A traveling correspondent of the *Bulletin*, of this city, in the course of a long and interesting article, thus speaks of the immense territory which is tributary to the Pacific:

It is the country which, 50 years ago, nobly in the other States wanted—the country which Lewis and Clark explored, and hunters and trappers occasionally saw. It is a territory larger than that occupied by all the States east of the Rocky Mountains. We do not ourselves know its full extent. No surveyor's chain has ever measured Alaska, and we have hardly explored New Mexico and Arizona. Then, there is Mexico, with its 10,000,000 of population, which is being Americanized, and in that way prepared for a membership in the great family of States. We hardly grasp the fact that in the territory tributary to the Pacific there is room for a larger population than is now included in all the States of the Union. The new empire will be greater than the old one, or rather the cluster of States facing or tributary to the Pacific will become more important than the States facing the Atlantic.

It may take a century to work out the result; but at the present rate of development, half a century will bring about this new relation. The Pacific States are far richer in natural resources than are the older Atlantic States. Timber, minerals, agricultural products, fisheries, climate—these are all

As the country fills up with population, the stupendous land jobbery which has been rife in all the country tributary to the Pacific, cannot be tolerated. No intelligent population will long remain passive under such evils. There is no place in this country for the safe development of the land jobbery which has so long cursed Ireland. A population without land and without bread is always on the eve of revolution. The Pacific States will be exempt from evils of this kind, because, for at least half a century to come, land will be comparatively cheap, and labor productive. The saddest fact about such a country as Ireland is that there are so new homes to be created. The most inspiring fact about this great and undeveloped country facing the Pacific, is that there are millions of homes to be created, and these very opportunities are inviting population to come in and create them.

## VINO INDUSTRIES.

Mr. R. B. Blowers is one of our model fruit men. Grapes with him are a specialty, but he is largely engaged in growing a great variety of other fruits. He has 60 acres planted to vines, the youngest of his vines being two years old. Every variety that can be profitably grown he has, and has experimented with many varieties that have not proved a success. His opinion, in regard to grapes, is, perhaps, worth as much as any man's in the county. His seedless Sultan is regarded as one of the leading grapes, because it is good for both wine and raisins, the wine from them being somewhat of the character of our imported champagnes, and the raisins having a peculiar flavor that makes them superior for pastry to the muscat. He has grown from vines six years old, seventeen tons per acre of the Sultan. When planted from cuttings and two years old, they yield with him about four tons per acre, and rooted vines, of the same age, will yield eight tons per acre. One of the advantages he has never met other men, in regard to irrigation, is that he furnishes himself with water from a system entirely his own, which he has constructed in the last two years. From a well twenty feet in diameter, and by means of machinery that he employs, using straw for fuel, he can pour on any part of his land 150,000 gallons of water per hour, or little more than 3,500,000 gallons in 24 hours. On pieces of ground, containing six acres, he has flooded entirely with water in eight and one-half hours. This water, if sold at the price the present Board of Supervisors fixed for water for the purposes of irrigation, would yield him a revenue of \$22.50 per hour, or a daily income of \$225 for each ten hours, or a monthly revenue of \$5,625 for each 25 days.

He regards the Emperor as the best for grape shipping, as it will remain fresh for a long time, and can be shipped with profit, at fair rates of freight, to our Eastern cities. He has eight acres of this variety, and they will yield from twelve to fourteen tons per acre. He is largely engaged in the manufacture of raisins, and by means of a dry house of his own invention, is not entirely dependent upon the sunshine to prepare his products for market. He has, in his packing-house, the first packing tray ever used in the State. The floor of this room is of manufactured stone, cool, clean and noiseless. He uses every kind of fertilization from our livery-stables, our slaughter-houses, and the ashes from all our factories where wood is burned. He has now 2,600 bushels of ashes ready for distribution, which contain the equivalent of 7,500 pounds of potash. This he deems necessary where cuttings are sold from the ground, to replace the properties of which the soil has been robbed. He intends to use a mill to crush the bones from the slaughter-houses, as he will be able to do this with the power he has already in use, cheaper than he can reduce with acids.

## SALE OF THE GRIDLEY ESTATE.

The following, from the *Chico Record*, of March 6th, will give our readers some idea of the value of land in Butte county:

The sale advertised by the Trustees of the Gridley estate, to take place at the town of Gridley yesterday, was attended by an immense number of persons, and bidding was spirited. Some of the most prominent capitalists and land-owners in the State were present, most of them from the San Joaquin valley. Major J. W. B. Montgomery purchased 800 acres of the land, for \$22,000. H. Scammon bought 900 acres for \$22,320. Major Marne Biggs purchased a half interest in the Gridley tract for \$12,000 from the Trustees, and immediately purchased the other half from L. C. Stone. This afternoon, in front of the Bank of Butte County, the Trustees sold a valuable tract of land, belonging to the Rancho de Farrell. The tract contains 1,900 acres, and lies along the Sacramento river. This piece is known as the "Reavis Bend." It brought a good price, being sold to Mr. E. C. Singletary, of San Jose, for \$13,450. The purchaser will receive \$1,000 for the rent of the land this year. Henry C. Silver and C. E. Gridley were high bidders for this piece of property. The purchaser is one of California's great land kings, who counts his farms by the thousands of acres. It is said that he has taken a fancy to this country lands, and will endeavor to purchase some of our large ranches.



and to go to, either for health or rest from business.

Four miles west from Arroyo Grande we come to the sea, where the Pismo landing is. A new wharf is built, over which vast amounts of produce are annually shipped, and millions of feet of lumber revivified. It is through the energy of Moherin Bros, that this wharf was built. To say the least, it is to be a great shipping point for this section of the country.

About midway between here and San Luis Obispo, on the Corral De Piedra creek, are the mines of the Pacific Asphaltum Company. The deposits are large, and yearly shipments are made to San Francisco, to the extent of 500 tons, by railroad to Port Harford, and thence on Pismo wharf. The company's works have been established since 1865. While here we had the pleasure of meeting W. S. Somervell, the senior partner, and in company with him, visited these famous deposits of asphaltum. Quicksilver, gold, silver, and chrome are found in different parts of the county. In fact, San Luis Obispo county has unlimited resources awaiting capital and labor to unlock their doors, which will repay them well, if they invest in the undertaking. To C. H. Phillips, Esq., and others, we owe much for assistance rendered in our efforts to show up the resources of this, one of the most wonderful and rich in undeveloped resources of any county in California.

#### PROBABLE YIELD.

We believe the grain crop of Stanislaus county will this year exceed 6,000,000 bushels. We base our estimate from the estimated yield of former years. For the past fifteen consecutive seasons we have figured on the grain product of our county. We think that we have uniformly approximated the yield quite closely. We have not as yet had time to look carefully over the entire area of the county. Much also depends on the season from now on till the 20th of May. When we say exceeding 6,000,000 bushels we aim to be cautious, and only calculate on an average favorable spring season for the growth and maturing of grain. The season of 1880 was Stanislaus' heaviest wheat yield. That year, especially the latter part of our rainy season, was exceedingly favorable. Our estimate for that year was 7,500,000 bushels. The yield on the West Side of the San Joaquin was that year exceedingly prolific. Our information at date is to the effect that the West Side prospects, whilst in a measure flattering, is not up to the standard of 1880. In the eastern tier of townships we find the average sown in grain is in excess of what it was in 1880. Through the middle part of the county good judges inform us that the cultivation of the soil is much better as a whole than it was in 1880. The benefits of careful tillage, springing from the experiments of such men as McHenry, Park, Hobb, Bangs, and Bailey near Salina, in the seasons of 1874, '75, and '76, which was at the time carefully and faithfully reported in the *News*, has spread quite extensively over the county. We now begin to realize the benefits of good cultivation. At one time, probably, our farmers were the most sloven cultivators of the soil in the State. We believe they can now begin to lay claim to being among the best. This superior cultivation is having a marked effect upon the production as well as the prosperity of the county. From such conclusions we now, even at this early day, believe we can lay the claim for Stanislaus county of being the hammer wheat-producing county in the State. At least we shall for the present place her probable yield at from 6,000,000 to 7,000,000 bushels of wheat and barley.—*Stanislaus County News*.

#### WHITE FISH FOR LAKE TAHOE.

The *Boon Grille*, a short time ago, stated that Mr. Gilford, of the California State fishery, arrived in Truckee, a few days ago, with thirteen large fish cans filled with Michigan white fish from the State hatchery, which he proceeded to deposit in Lake Tahoe. Mr. Gilford stated that a carload of carp from the East will be shipped out among the different lakes and streams, and that this section would doubtless be remembered; that they would be deposited only where public fishing was allowed, and that all the lakes and ponds in this section of country would receive a share of the stock.

## LAKE COUNTY.

**Mineral Springs—Fine Climate—Quick-silver Mines.**

**Vineyard Lands and Other Agricultural Resources.**

(By the Traveling Agent of THE PACIFIC.)

Lake county, California, is located some 75 miles due north from San Francisco. It is bounded on the north and north-west by Mendocino, on the north and north-east by Colusa, on the south by Napa, and on the south-west by Sonoma county, while Yuba corners it on the southeast. Lake is one of the smaller counties of California, having an area of 621,000 acres of surface, and in shape it is nearly a perfect oval.

Lake county possesses certain peculiar resources and attractions which are sure, in time, to make it famous and prosperous. At present it is somewhat isolated, as there are no railroads touching the county; Calistoga, the terminus of the Napa branch of the California Pacific, being some twelve miles from the south line of the county, and Cloverdale, the terminus of the San Francisco and North Pacific R. R., being some fifteen miles from the west line of the county. There is, at present, a fair prospect of this road being extended to Ukiah, (the county seat of Mendocino county), a distance of 25 miles; and when the people of Lake county build a road from Lakeport, (the county seat of Lake county), a distance of eighteen to twenty miles,

of the finest mountain scenery in the State, are located in the north end of the county; at the foot of these lakes is one of the finest resorts on the coast, kept by Theodore Denning.

#### Streams.

Catche creek, a clear, sparkling stream, is the outlet of Clear lake, Patch and St. Helena creeks head in the southern portion of the county. Middle and Clear creeks, two beautiful little streams, empty into Clear lake. One branch of Cache creek heads up in the northern portion of the county, and has a course of some 25 miles within its borders. There are numerous other small mountain streams, such as Scott's, Adobe, Kelsey, Coal, Sugar, Soda, Hunters, and Herndon creeks. So we might say Lake is one of the best watered counties in the State.

#### Mineral Springs.

Lake county is becoming one of the most popular summer resorts of the coast, on account of her numerous mineral springs, the waters of which possess great medicinal virtues. There are a great number of these springs that are being improved with fine hotels. Some of the most noted of these and best known abroad are Bartlett's, Highland, Hubbin's, Pearson's, Siegel's, Allen's, White's, Howard's, Adams', Thermal, and Anderson's, but there are hundreds of others whose waters are very fine, and which will become famous in time. A large number of invalids and health-seekers visit these springs annually, the number continuing to increase, year by year, as they become better known. By universal consent, the scenery of Lake

copper, soda, alabaster, manganese, manics, potash and asbestos; these constitute some of the geological formations of Lake county.

#### Valleys.

The agricultural portion of Lake county is composed of a large number of beautiful little valleys, embracing in all about 120,000 acres. The principal of these are Big valley, Long valley (on either side of the lake), Burnie's valley, High valley, Jerusalem, Jerico, Cayote, Capay, Lower lake, Locomo, Cobb, Donovan, Scott, Bachelor, Upper lake, Clover, Squaw, Irwin, Gavelly, Rice's and Paradise valleys, comprising the very best land for wheat, barley, oats, potatoes and vegetables of all kinds. These valleys are well watered; and in this county there is never any occasion to use artificial means to insure good crops. Farms generally do not exceed 160 acres in extent. The hills that surround these valleys are composed of the best of soil for grapes; and wherever, especially in southern Lake, experiments have been tried, the vines have proved very hardy, productive and remunerative. The mean temperature of the climate is higher, and there is less early and late frosts than in some other vineyard counties in California. So great are the capabilities of Lake county in this industry, that the attention of capitalists is already directed toward it.

#### The California Agricultural Improvement Association.

Is a corporation that has done much in developing the vineiculture and fruit interests of this county. Mr. R. K. Nichols, the Superintendent, took the pains to show us over these lands, embracing some 3,800 acres. They consist of a kind of volcanic, calcareous tuff, and are rich in lime. In their natural state they are covered with scattered oak and pine trees, and thick with underbrush and surface lime rock. Mr. Nichols has a systematic way of clearing these lands by digging out the trees, removing all the rock, brush and roots; then by deep plowing and cross plowing gets the surface in the finest condition for vines and fruit trees. This company now have a vineyard of 160 acres of two-year old vines, which are all of the choicest foreign varieties; and they are putting in 160 acres more, together with 2,000 Hungarian prunus and a large amount of other fruits. They have 117,000 rooted cuttings to be planted this spring. Some of their young fruit trees are just coming into bearing; they have about ten acres of land devoted to the raising of all classes of vegetables and garden fruits, which are sold to the miners of the various quicksilver mines. This company also own large tracts of land in various portions of the county, but their improved lands are located in the vicinity of Lower lake.

Fruits of all kinds, such as apples, pears, plums, apricots, peaches and nut prunes, are remarkably well here; most of the orchards are young and just coming into bearing.

Sheep-raising is one of the principal industries of the county; the extensive range afforded by the mountains and foothills make this a profitable business. Owing to the mildness of the climate, sheep are very healthy, and, as a consequence, Lake county produces excellent wool.

#### Lakeport.

The county seat, is the largest town in the county; it is located on the margin of Clear lake, on the west side. It contains about 1,000 inhabitants. The town is beautifully and picturesquely situated; the ascent from the lake is gradual for several blocks, when a succession of mound-shaped hills is met, making magnificent sites for residences, commanding a splendid view of the lake and surrounding mountains.

There are two banks doing a general banking business: the Bank of Lake, F. D. Tins, president, and the Farmers' Savings Bank, J. W. Mackall, cashier. The Farmers' Business Association is conducting a large business in general merchandise, hardware, and agricultural implements. There are several other large general stores—Sensmore, Reynolds & Co., Levy & Levin, S. A. Gully, groceries and provisions; Geo. A. Lyon Jr., dealer in books, stationery, etc.; C. E. Pheban, a druggist, who also keeps a variety of general merchandise; Geo. H. Farce, hardware; A. Biggs, jeweler, and A. Cobb & Son, general merchandise. There are a number of other smaller business houses, pursuing nearly every branch of the mercantile business. The *Bee Democrat*, published by Cronk & Jackson, is a very good local country paper. Green's—the principal hotel—is kept by W. W.



**VETERANS' HOME, TO BE BUILT IN NAPA VALLEY, CALIFORNIA.**

to that point, it will bring their county into direct railroad communication with other parts of the world. The Vaca valley and Clear lake Railroad is now completed to the lower end of Capay valley, a beautiful agricultural country, following Cache creek up Clear lake valley, the principal agricultural portion of Lake county.

At present there is stage connection, via Calistoga, by Fisher's line, to Lakeport, via Middletown, Glen Brook, Lower lake and all the springs. Also, via Cloverdale, by Sanborn's stage line, via Hopland, Ukiah, Upper lake and the springs, through Lake county. This company run a line (daily) from Cloverdale through Mendocino and Humboldt counties to Eureka, California.

The general topography of this county is rolling and hilly. Located in the Coast Range of mountains, in the extreme north end, is Mount St. John, one of the highest points in the county; it is some 4,000 feet above sea-level, Cobb mountain, in the southern part of the county, is 4,502 feet high; and Konoeti, sometimes called Uncle Sam's Mountain, situated in the central portion of the county, is 3,983 feet above the sea.

#### Clear Lake.

From which the county derives its name, lies nearly in the middle of the county, and forms one of its principal features. This lake is about 30 miles in length, and from three to ten miles in width. It lies in a northeasterly to a south-westerly direction. Several little streams, and numerous pleasant bays upon its crystal waters. Tule and Upper, two small lakes in the north-west portion of the county, are really continuations of Clear Lake.

#### Hot Lakes.

Two beautiful little lakes, wedged in between some

county is awarded the palm, as being the grandest in the State. To the lover of nature, in its rugged, as well as in its softer and more pleasing aspects, this county possesses an unequalled variety of landscapes to please the eye—combining lofty mountains with valleys which are fair to look upon, and a magnificent sheet of water embosomed in their midst. No tourist who comes hitherward can fail to admire the extreme beauty and grandeur of the panorama as first viewed from the summit of some of these mountains, the beautiful lakes lend such a fascination to the scenery. But the great charm of this locality is its pleasant and healthful climate. The winters are never severely cold, nor are the summers oppressively warm. From November to April, much rain usually falls, and ice occasionally forms; but during this period, there are days and weeks when the sun shines brightly, and the weather is perfectly delightful.

#### Mineral Resources.

The southern portion of the county is skirted by a semi-circle of rolling hills of a metamorphic crystalline rock, rich in deposits of cinnabar. Several extensive quicksilver mines are now being worked. Two of these, the Sulphur Bank and the Great Western, are extremely rich. There are several other mines that are rich in this mineral, but are not worked on account of the low price of quicksilver. Large quantities of sulphur are also shipped annually from these mines. On the east side of Clear lake is Berax lake, where that mineral is found in its mud, and has been quite a source of revenue to its owners. Gold and silver are also known to exist, besides various other minerals, feldspar, mica, hornstone, oxide of iron, Jasper, basalt, trap, lava and blue sandstone petrification,



Green, Mount Cottage and Man's hotel, kept by J. Manig, afford ample accommodation for the people of Lakeport.

One flouring mill, owned and run by M. Starr, furnishes a good quality of flour for the people of the surrounding country.

Beck & Harlin own some 4,000 acres of timber land; they saved 1,000,000 feet of lumber in 1882, and they estimate the standing saw timber of Lake county, which is principally pine, at about 150,000,000 feet.

Land, within a radius of five miles of Lakeport is valued as follows: First-class agricultural and improved land at from \$30 to \$75 per acre; second-rate, from \$45 to \$55, and third-rate, or grazing land, from \$15 to \$18 per acre.

About seven miles south-west from Lakeport, we come to

#### Kelseyville.

Which is situated in Big Valley, one of the finest agricultural sections in the county. This place contains about 100 inhabitants, and has two hotels. A. A. Sloan has a large general store. Clendenin & Bro. are also in the mercantile business. Besides one drug store kept by Dr. J. T. Bacon, and several smaller stores, it has three carriage and wagon shops, the most extensive of which is that of W. M. Noble, three church buildings, a public school, two hotels, one of which, the Uncle Sam, is kept by M. A. Howe, and in the vicinity are the Kelsey Flouring Mills and the pork-packing establishment of W. Stonbraker. The county in this vicinity is thickly settled with well-to-do farmers, and as they do most of their trading in Kelseyville, it will always make it a place of considerable trade. The surrounding country is all fine farming land, valued at from \$30, and some of the best improved farms as high as \$100 per acre.

We now pass on about seventeen miles, in a southwestern direction, to the extreme south end of Clear lake to the town of

#### Liver Lake.

Which is situated about two miles from the lake, is a place of considerable trade, it being the market-place for the Sulphur Bank mine, in the immediate vicinity. Here, are also several fine productive valleys. This town now contains about 700 inhabitants, and is a place of considerable enterprise. The finest school-building in the county is located here. Mr. R. Wells keeps the Cosmopolitan hotel, and also the only drug store in the town. C. C. Barker is proprietor of Del Mont hotel. M. Levy & Bro. have a large general store; Getz Bros., also in business in San Francisco, have a similar establishment. One live newspaper, the *Bulletin*, is published every Saturday, by J. B. Baccus, Jr. One brewery and a number of business houses, also a church and a fine Masonic and Odd Fellow's hall, are in the town.

In this vicinity are located some of the finest grape and fruit lands in the State. David Voight's vineyard, now in full bearing, is within one mile of the town. Mr. Voight is making some of the finest mountain wines in the State; thus demonstrating the future value of these lands which, at present, can be bought quite reasonable.

In the extreme south end of the county, on the stage line between Lakeport and Calistoga, the terminus of the C. P. B. R., and about eighteen miles from the latter place, we come to the village of

#### Middletown.

Which is a place of some 300 inhabitants. Several of the quicksilver mines are located in this vicinity, which are the chief support of the town. There is considerable timber in this region, and some of the finest steep-ranges in the county are here. C. M. Young keeps the principal hotel; D. Lobe & Co. have a large store. C. W. Armstrong keeps a drug and stationery store. These constitute the principal stores of the place. Ford & Rawson's saw mills are located in the vicinity. Several carriage and wagon shops are doing a lively business. A large number of teams pass through this place, from the upper country, to the railroad at Calistoga. J. M. Hamilton is doing quite a live business in real estate. He is selling grain-farms, fruit-farms and sheep-ranges in different parts of the county. Land in Lake county is held by United States patent, with the exception of three Spanish grants that have long since been settled and subdivided.

#### Upper Lake.

Situated about one mile from the upper or northern portion of Clear lake, contains about 350 inhabitants. It has two good hotels, two saw mills, several general stores, two churches and a good school. It is in the midst of a fine agricultural country, and is a thriving little place. Large amounts of hops are being planted in the immediate vicinity. Here, on a large farm, resides Mr. Benjamin Dowell, who came to California in 1845. He was the man who made the celebrated bear flag at Sonoma; this flag is now in the possession of the California Pioneers of San Francisco. Mr. Dowell is quite familiar with the early history of our State, and corroborates many of the important events, recently published in *The Resources*, which we obtained from Gen. M. G. Vallejo, who is still residing at Sonoma.

#### East Lake.

Sometimes called Sulphur Banks, is located at the

southwestern end of Clear lake, and contains about 150 inhabitants, who are mostly engaged in the mines. This company shipped 11,500 flasks of quicksilver in 1882, and are producing from 800 to 100 flasks per month, at present.

#### Clear Beach.

A beautiful place situated in a little valley 28 miles above Calistoga, and thirteen miles from Middletown. This is one of the finest summer resorts in the county. A number of cottages, a fine orchard, pure mountain air, good hunting and fishing, are among its principal attractions. Bassett & Sons are the proprietors.

#### Fish.

Clear lake abounds in perch, pike, silversides, blackfish, sucker, and lake trout. White and catfish are also making their appearance in the lake, they having been sent there by the Fish Commissioners some seven years ago. The streams flowing from the mountains have plenty of brook trout; but the best fisheries for the favorite game fish are the recesses of the mountains, where ordinary tourists do not penetrate. The fish from the lake run up all the tributary streams, in the spring, in vast quantities. There are no salmon in the lake, but in the northern portion of the county—in the headwaters of End river—they are abundant. The perch is a favorite fish, but it is only caught in Clear lake, or in some of the smaller lakes of the county. This fish never migrates, to any extent, from the lake, and only bites during the latter part of April and during May and June. With the exception of brook trout angling, there is no sport equal to that of fishing during the season of perch.

#### Wild Game.

Among birds, canvas-back, mallard, teal and other kinds of duck are, in season, very plentiful on the lake. Wild geese also resort here in winter. Quail and doves are found in all parts, but especially in the northern section of the county.

Wherever there are forests of fir, grouse are surely found, as well as mountain quail. Wood-duck, partridge, lynx, foxes, coons, wildcats, bears, otters, and mink also should be added to the list. In fact, there is no county in the State where game especially fish, of all kinds, is more abundant.

Lake county is well supplied with timber, consisting of several kinds of pine, fir, and oak, the latter in great abundance, and furnishing inexhaustible supplies of cordwood and tanbark.

What Lake county most needs is railroad communication with other parts of the State; then this favored district, with its invigorating climate, beautiful scenery, forests of timber, mineral deposits, pastures that afford grazing for hundreds of thousands of sheep, sunny hill-sides, the natural home of the grape, fine fruit and vegetable lands, lands that are yet cheap, will become known. When we consider all the natural advantages of Lake county, we are compelled to believe that her future prospects are very bright. This is yet a comparatively new county, and many of its resources are but partially developed; yet it is so near San Francisco, the great commercial center of the Pacific Coast, that once it is tapped by rail, then will this county change as by magic.

#### THE CALICO MINES.

From the following, taken from the *Grass Valley Union*, it appears that Calico district, in San Bernardino county, is very rich:

S. P. Blude, who lived on the Comstock years ago, has been prospecting in the Calico mining district, San Bernardino county, which is now attracting a great deal of attention. He says the mines are all turning out high grade ore, and holding out well. Several sales have recently been made. W. Stevens sold a claim for \$14,000. He was sent there a year ago without a dollar, and leaves with \$20,000. Wm. Raymond, who made the purchase, also bought a mine in the Lava Bed section, 37 miles south of Calico, for \$1,000. The Lue mine, in West Calico, is turning out ore that runs as high as \$400 to \$800 per ton. Nels-wager & Co. having a lease on it for six months. The Sam Houston mine was sold last summer for \$4,000, and after the purchasers had taken out \$15,000 they sold the mine for \$15,000. Mr. Neal is shipping rock to Sherman's mill, eight miles distant, to be worked, that will go as high as \$600. Numbers of others are at work developing their mines. The King Mining Company have leased their mine to Los Angeles parties. They have taken out 100 tons of ore, and Nuleau has the contract for hauling it to the Mojave river, 40 miles distant, to be worked. The Waterman mine has been worked steadily for the past eighteen months, day and night, and is shipping weekly about \$15,000. This mine is located about ten miles from Calico, on the same range, and employs about 40 men. Ten miles below Calico is the Sherman mill. It has five stamps and five more are ready to be put up. At the Calico railroad station is the Oriental Company's big mill. It will be ready to run in a few days with twenty stamps.

#### GROWING LIQUORICE.

A writer in the *Evening Post*, of this city, in giving an account of Isaac Lea's fruit orchard at Florin, Placer county, states that the proprietor has entered into the experiment of growing liquorice. He described it as follows:

In 1876 he received two small cuttings from Europe, and from this meager beginning he has produced a marketable article. His brother, Thomas Lea, of San Francisco, who, by the way, built and operated the first malthouse on the coast, at North Beach, Stockton street, in 1854, brought several large roots of the Florin liquorice to the office of the *Post*, to illustrate what may be accomplished with care and intelligent industry on this coast. The article was very far superior to the imported liquorice, giving evidence of a generous soil and favorable climate. This year Isaac Lea has planted 40,000 cuttings. The mode of the cultivation is simple. Deep furrows are plowed four feet apart, and the root cuttings, three or four inches long, are dropped in the trench at intervals of from six to twelve inches, and earthed up. The smaller cuttings, like thin twigs, grow best. After planting, all that is needed is to keep the ground free from weeds and loosen it with a cultivator. In three years the roots are ready, and when cleaned and dried are ready for the market. The root is perennial, and several of the specimens exhibited by Thomas Lea, from his brother's farm, were over an inch in diameter.

#### F. A. HATCH & CO.,

(Members S. F. Produce Exchange.)

#### COMMISSION MERCHANTS,

122 CLAY ST., SAN FRANCISCO.

Flour, Grain, Wool, Beans, Dried Fruit, Honey, Etc.

LIBERAL ADVANCES MADE ON CONSIGNMENTS.

—AGENTS FOR—

Healdsburg X X X Flour

—AND—

UNION MILL FLOUR.

#### PACIFIC COAST LAND BUREAU.

A CORPORATION.

President, . . . . . WENDELL EASTON.  
Vice-Pres. and Gen. Manager, . . . . . GEO. W. FRINK,  
Treasurer, . . . . . ANGLO-CALIFORNIAN BANK,  
Secretary, . . . . . F. B. WILDE.

#### BOARD OF DIRECTORS:

J. O. ELDRIDGE, G. W. FRINK, GRANT I. TAGGART, F. B. WILDE, WENDELL EASTON.

#### PRINCIPAL PLACE OF BUSINESS:

NO. 22 MONTGOMERY STREET.  
San Francisco, California.

Sub Agencies at Each County Seat of the State,

—ALSO—

NEW YORK, NEW ORLEANS AND LONDON.

Agent for Sale of Lands of the Central Pacific and Southern Pacific Railroads.

AGENCY FOR SALE AND EXCHANGE OF FARMING LANDS.

Large Tracts Subdivided and Sold at Auction or Private Sale.

Colleges and Universities located. Careful Appraisements made for Banks, Courts, Administrators, Trustees, etc.—Legal Forms completed with Full Records of sales in each county on file at the General Office—Assessors notice change of Property, pay Taxes, Insurance, etc.

Special attention given to Colonists, Immigrants, Travelers and Tourists. Correspondence solicited. Send for Circulars of Prices and California Guide Book.



OPPOSITE UNION SQUARE.

THE LEADING

Commercial School

ON THE COAST.

LIFE SCHOLARSHIPS

—FOR—

Business Course. Only \$70.

NO VACATIONS.

Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Beautiful Location.  
Ladies Admitted.

Special Inducements Offered to Persons of Neglected Education.

Business Course.  
Academic Course.  
Combined Course.  
Penmanship Course.  
Modern Languages.  
Photographic Course.  
Special Branches.

For Further Information call at the College Office

No. 320 POST ST.,

Or Address the Proprietors,

CHAMBERLAIN & ROBINSON.



## CITRUS FRUIT-PRODUCING LANDS.

That lands which grow citrus fruits command a high price in Southern California, and are much sought after for the profits that are to be derived from the culture of this class of fruits, the following extracts from the published statement of those who have visited that region during the late citrus fair, will show. One of the party who accompanied Matthew Cook, and visited the fair at National City, San Diego county, the fair at Riverside in San Bernardino county, and nearly all of the orchards and vineyards in the two counties named, as well as those of Los Angeles county, sums up his experience upon the land values as follows, in the *Sacramento Record-Union*:

"San Diego comes to the front with producing fine fruits. Where irrigation is almost out of reach, further than what is taken from Mother Earth by windmills, etc., unimproved lands are offered, near the railroad stations, at from \$75 to \$150 per acre; fifteen miles from the railroad, say \$25 dollars per acre. Riverside, San Bernardino county, asks \$200 to \$300 per acre for unimproved lands, with water rights, and for orchards coming into bearing \$1,000 per acre, and in some cases \$2,500 per acre. A trade was made on the 16th instant of twenty acres for \$19,000. At Los Angeles and vicinity orchard property is bringing very high figures, in fact a boom is raging throughout that section. There can not be any doubts or doubts that the appearance of the orchard property in Southern California is beautiful, and the returns from many orchards are large, nay, handsome. For instance, a dealer in Los Angeles, E. Grawin, paid for the Wolfskill orchard crop of oranges (28 acres), and packed and boxes them, \$25,000. And many such trades have been made. Nearly a million of citrus trees will, in addition to those now bearing, send their produce to market within the next two years. Are calculations based on these sales to be relied upon as future prices? If so, then the produce of Southern California, rated at \$1,000 per acre, warrants the present boom. The query may be made, can any other portion of the State produce such results, and have an equally reliable market for their produce? I think that there can be relied on a fair market in Sacramento, and adjoining counties of Central California, for orchard produce. In this vicinity (Sacramento) Bartlett pears produce, in cases, over \$1,000 per acre. In many cases peaches, apricots, cherries, plums, currants, grapes, etc., pay handsome returns per acre. But what is the moral to be learned? Riverside and vicinity is free from fruit pests, and the people there insist on keeping free from them, therefore the large returns. At Los Angeles, Mr. Wolfskill, McKinley Brothers, and other, have fought the pests and are receiving high returns. Many of our fruit growers in Central California have succeeded in checking the spread of insect pests in their orchards, and are amply rewarded for their work. But the outlook at present is 'that only the fittest will survive.'"

As there are many hundreds of acres of land near Oroville that will produce citrus fruits, with every climatic condition equal to that possessed by Southern California, if even not more favorable for the production of semi-tropic fruits; while the entire section around us will mature to perfection the most profitable kinds of deciduous fruits, such as the Bartlett pear, the prune, plum, peach, apricot, nectarine, persimmon and fig, and all sorts of berries, there is no good reason why the high-priced "boom" in lands should not reach this vicinity in due time. Land owners of Butte county, and particularly those of the foot-hill region where the red lands approach the edge of the valley, and where fruit culture, both of semi-tropic and deciduous varieties, can be carried out to perfect form, should be guided by the experiences of the Southern Californians and thereby attract hither an immigration that would, by its occupancy, not only enhance the land values here many fold. *Oroville Mercury*.

## LARGE BEETS.

The *Petaluma Courier* says: We have seen beets raised here, round and solid, one of which weighed 75 pounds. One gentleman in Vallejo township, who planted on adobe land two acres of Mangel Wurtzel beets, gathered 60 tons some weighing as high as 50 pounds, and averaging throughout the crop from 15 to 30 pounds each.

## DIVIDING LARGE RANCHES.

In speaking of this good work, just begun in Sonoma county, the *Petaluma Argus* remarks: "The great curse of Sonoma county has been the tendency of our people to hold land in large tracts. The effort has been to keep out population and prevent development, corresponding with the and productive worth of soil and climate. Just think of our county that extends coastwise from San Pablo bay to the Gualala river, a distance of 60 miles, and in its breadth embracing a large number of valleys of uninvaded fertility, and a broad expanse of hills and mountains of proven adaptability for the growth of grapes and an endless variety of orchard fruits, without having recourse to irrigation, and yet we can only boast a haggard record of 6,990 registered voters. With a territory greater than some of the New England States can boast, and yet the entire population of the county, including towns and country, is not equal to that of many of the least consequential cities of those diminutive States of the East. Making all due allowance for the age of settlement here, yet it is painfully apparent that in point of development and population Sonoma county is at least two decades behind what it could have been had the land here been government title and the limit to individual entry 160 acres. But for the Spanish grants this county would have four-fold the population it has today. But there is no hope for the past, and it is with the future that we have now to deal. There is a glimmer of light ahead, at present. There is an unmistakable tendency, just now, in the direction of subdivision and sale in lots to suit, of hitherto large holdings. Within the past few months there has been more sales of land in small lots, to suit, than there has been in years before. The work of subdividing and selling lands in lots of from ten to fifty acres is now



STATE LINE.

## SCENES IN NORTH-EASTERN CALIFORNIA.

fairly inaugurated in the upper end of the county. Some of the purchasers are parties who have visited the southern portion of the State in quest of vineyard and fruit land, and they are surprised to be able to get as good a quality of land in this county, and at much lower figures than they could possibly get it down there. It is an incontrovertible fact that there are thousands upon thousands of acres of land in Sonoma county, of the very best quality for vineyards and orchards, that is now being used as cattle ranges and sheep calks. Very much of this land (that \$50 or \$60 per acre would be the outside prices it would command, in quantities sufficient for farming, dairy or stock purposes), could find ready sale at from \$75 to \$100 per acre, if offered in lots of from 20 to 40 acres. We are evidently feeling the first ground-swell of a real estate boom in this section, and we confidently expect to see many of our large ranches succumb to the inevitable, and be parceled out at good prices to those in quest of small tracts of land upon which to establish permanent homes.

## CLIMATE OF GRASS VALLEY.

The *Tidings* says that the climate is mild all the year round. It is considered very cold by the climate-pampered population when the thermometer in winter gets as low as 22 degrees above zero. The temperature rarely goes below that mark, and indeed, seldom gets so low. In the hottest days in summer, when the mercury may get into the high nineties, the climate is enjoyable for the reason that the nights are always cool, so that refreshing sleep can be had; sleep that refreshes. For health the climate cannot be excelled anywhere in the world. The odor of the June tree loads the air with healing to weak lungs, and the natural purity of the atmosphere is not marred by deleterious exhalations from ill-declined soils.

## A SENSIBLE SUGGESTION.

The editor of the *Colusa Sun* received an orange grown in the garden of a neighbor recently, which measured eleven inches one way and nearly as much the other, and weighed nine ounces. This leads the journalist to make the following sensible remarks, which will apply to many other localities besides Colusa: "While we do not recommend people to go into orange culture largely in this valley, or try to compete in the markets of the country in the lower counties, yet the proof is continually before us that there is an need of importing oranges into Colusa county. In fact we are not justified in importing anything that will grow in any portion of the State. This cold weather has been very hard on young orange trees, but we have not observed any great damage to the larger ones. On a small scale one can afford to protect the trees for a few winters, just for the purpose of having nice, fresh oranges of home-growth. In our home markets the grower would have the advantages of freight from Los Angeles up here, and being able all the time to offer a fresh article. We are much obliged to Mr. Gillespie for the sample sent us."

## REAL ESTATE.

The following, from the *Real Estate Circular*, published by Thomas Magou, of this city, will give some idea of the good effect of the recent rains.

The weather, so persistently and continuously dry as it had been for some two months previous to the 23d ult., had begun to affect real estate very unfavorably. Everybody believed we were in for one of the very driest of dry seasons; but the rains at last came in quantity sufficient to save the crops in most of the agricultural districts. Buyers had begun very generally to hold back, under the belief that the improvement of the past year



TRUCKEE RIVER.

## SOUTHERN CALIFORNIA APPLES.

A writer in the *Rural Press*, of this city, who has visited the citrus fairs recently held at Riverside and San Diego, furnishes that journal with the following:

We have had intimations for the last three years that the apple might contend with the orange for the possession of Southern California sunshine. The recent fairs at the south have brought the apple forward into greater prominence than it has before enjoyed. The presence of many northern apple growers at these fairs naturally brought the southern apples under test and discussion, and it may frankly be said that the apples shown were a great surprise to the visitors, who had never been awakened from the old dream that Southern California could not grow good apples. These visitors while examining the fruit grown in the National Ranch and that shown at Riverside from San Bernardino county trees acknowledge that the southern specimens surpassed anything they themselves grew, in their quality of keeping firm, crisp, and juicy to this late day. Los Angeles county has had an apple record for some time, though perhaps it has not been so generally known as it should be. And apples, too, are about as profitable a crop as can be grown, even in the region famous for semi-tropical fruits. It is true, however, that all varieties do not give satisfaction, nor is it likely all locations are suited for apples; but there is data enough available for selecting the right varieties and right location if the intending apple grower will visit the owners of the bearing orchards in the different counties we have named.

A tribute to the value of the San Diego apple has come from the East in the shape of a letter dated February 24th, from K. H. Calkins, a well-known horticulturist of Burlington, Iowa, to F. A. Kindall, of National City. We make the following extracts:

I wish now, particularly, to speak of the beautiful specimens of Wine Sap and White Winter Pearmain apples you sent us, and of their excellent quality, more especially the Wine Sap. I think I never saw their equal for beauty and large size but one, which was some exhibition of specimens from Kentucky. Their superior I have never seen, and I have attended a number of notable exhibitions that were unusual in character. The fact that California, at its extreme southern limit, can exhibit northern varieties of fruit of such excellent quality and so well preserved far into the winter, and in this respect put to blush the best preserved specimens of northern growth, was a wonder to all beholders and of itself a marvel. A couple of days

since, the last Wine Sap I brought home was divided with my better half, after it had set in our living room five weeks, and had become considerably wilted, and was pronounced by both of us to be excellent, and in better condition than any in our cellar which had ripened in the northern climate. Such a quality of apples would have found a market in this apple country last fall at about four dollars per barrel, and would now be eagerly taken at five dollars.

## TIMBER LANDS.

The timber lands of Northern California are now attracting great attention, and one of our exchanges has published about 300 applications to purchase. The timber lands of Shasta county, of which there are immense quantities, are also being looked up by capitalists and settlers and there will soon be a rush for them. Two companies, commanding large capital, already have agents busy examining our timber resources, and applications for large amounts of land will no doubt follow. These lands, especially those near the line of the railroad and on large streams leading to or near the road, will be very valuable in the near future, and those who can now secure a portion of them will find it to their financial advantage to do so. There are thousands of acres of fine timber on the North Park of Cottonwood, Clear creek, along the Sacramento and tributaries, Pit river and numerous branches, that afford splendid chances for those desiring to locate them. The Government price for timber lands is the same as for mineral, \$2.50 per acre, and can be purchased in 160-acre lots by single purchase, or in that proportion by associations of persons.—*Shasta Courier*.

## CALIFORNIA AND FRANCE.

The vineyard area of California is much greater than that of France.

## HOPS AND HOP PROSPECTS.

After careful inquiry we have become fully satisfied that the increased area devoted to hop culture in this county will exceed 500 acres, which, of course, promises a greatly increased revenue to our enterprising farmers, even though hops should not bring more than 50 cents a pound. The old fields have been worked and pruned, and are already putting forth, while the new fields are in, and the labor of the season fairly begun. Such a demand for hop poles was never known before, and many teams are constantly employed hauling them from the redwoods. A large number of the farmers secured their poles in advance, and they have them already sharpened, and are now putting them in position to receive the vines. This promises to be a busy season, and we trust a most profitable one.—*Mendocino Dispatch*.



## THE SANTA ANA VALLEY.

Within the limits of this valley the orange, the lemon and the lime grow side by side with the apple, peach and pear—while the delicious apricot of A-la flourish and mature to perfection with the fig of Turkey and Smyrna, the almond of Italy and the English walnut. The vineyards of Santa Ana rival those of France or Hungary, both for variety and excellence, while the production is four to one. It would stagger the most fertile imagination to attempt a computation of the possibilities of this valley. The variety and productiveness of its soil offers a field for every phase of agriculture and horticulture. From 80 to 100 bushels of corn are raised in the acre and, at the same time, between the rows of corn, are raised large yields of onions, potatoes and pumpkins. Scores of farmers, after harvesting a crop of barley, realizing from 60 to 100 bushels in the acre, plow the land up and plant to corn or potatoes, thus securing two crops a year. The most gratifying results have followed almost every intelligent effort put forth in agriculture and horticulture during the past five years, and very handsome profits, varying from \$50 to \$500 an acre, have rewarded the energetic and enterprising tiller of the soil.

The geographical position of the valley is most fortunate indeed. No intervening mountains arise between it and the coast, and thus for the greater part of the year its inhabitants are fanned by the gentle sea breeze, making the days more pleasant and the nights simply delightful. The average temperature for the past seven years is 65 degrees, the highest average in any month being 75 degrees in August and the lowest, 56 degrees in December.

The shipments from Santa Ana alone by rail and steamer, for the year 1882, aggregate the enormous amount of 32,000,000 pounds, some of the principal items being 6,207,000 pounds of corn, 800,000 pounds of barley, 1,800,000 pounds of wool, 3,207,870 pounds of coal, 200,000 pounds of potatoes, 93,240 pounds of eggs, 80,000 pounds of beans, 40,204 pounds of hops, 150,000 pounds of honey, 185,850 pounds of wine, and 27,780 pounds of dried fruit. The shipments also embraced 331 car loads of hogs, 57 car loads of sheep, 61 car loads of green fruit, 21,212 boxes of raisins, 18,607 boxes oranges, 12,780 boxes lemons and 560 boxes limes.

With this showing from a valley scarcely ten years settled, who can estimate the products and income arising therefrom within the next ten years? Let it be borne in mind, also, that not more than one-third of this valley is under cultivation.

The principal town in the valley, and the second largest in the county, is Santa Ana, about 32 miles southeast from Los Angeles. It is the terminus of the Santa Ana and Los Angeles division of the Southern Pacific Railroad. Its location and surroundings are in the highest degree picturesque. It is situated on a slight eminence, while on every side stretches away the fertile valley—on the east to the Santa Ana mountains, on the north to the orchards and vineyards of Anaheim, and on the south and west to the Pacific Ocean. Its orange groves and handsome villas—its orchards and vineyards lend an additional and attractive charm to its beautiful and attractive surroundings, while its growing importance as the center of one of the largest and most marvellously productive regions on the coast, renders it indeed one of the most desirable locations to those seeking homes. Santa Ana has a population of about 2,500, and is steadily increasing. With such magnificent and important tributary sections as it possesses, with its splendid harbor at Newport, only eight miles distant, with its railroad connections, and its mild and healthful climate, Santa Ana will surely become a city of considerable wealth and importance.—*Santa Ana Standard.*

## BONANZA FLOOD'S RANCH.

A San Diego correspondent of the *St. Louis Republic* thus describes one of the most notable ranches in California, belonging to James Flood, one of San Francisco's most wealthy citizens.

Going from San Bernardino by stage towards the sea, whereabout fifteen miles from San Diego we dashed out of the gorge and a gorgeous view of the ocean burst upon our sight. The sun was sinking into its watery bed and the ocean shone resplendent with crimson and gold. Turning to the other side we saw the moon, pale and glaucous, rising over the mountain peaks. Such scenes as these greet the delighted gaze of the traveler so often that it seems one might become accustomed to such beauties, but I find it always new and wonderful. We had passed, during the afternoon, a very large and noted ranch, comprising tens of thousands of acres of land, and covered for miles with cattle. Our road ran directly through it. The houses were comfortable looking and large, built of adobe, plastered on the outside, and white (with green shutters) was the prevailing color, one story high. This ranch is called the "Santa Margarita ranch," and has just been sold to Bonanza Flood of San Francisco for \$450,000.

Subscribe for *THE RESOURCES OF CALIFORNIA.*

## CALIFORNIA AS A CORN-GROWING STATE.

The following is taken from the agricultural department of the *Record Union*:

This promises to be a good season to plant corn and raise a summer crop on lands intended for wheat in the fall. The ground all over the State has been thoroughly saturated with water, and the air will remain comparatively moist during the entire summer season, and consequently we may look for comparatively warm growing nights and a ventilation of climate generally favorable to the growth of corn. While we would urge upon grain farmers the importance of summer following their lands for the sowing of wheat in the fall, and of early sowing, we would also recommend the more general cultivation of corn, as an alternate crop with wheat. Let a portion of the land which is to be put down in wheat this fall be plowed now, and well drugged down, pulverizing the surface thoroughly, so as to retain the moisture now in the soil, and to attract warmth from the rays of the sun until time for planting corn—say about a month hence; then furrow the ground both ways, letting the plow go to the depth at which it is desired to place the seed below the surface. This will vary with the soil, but in this State corn should be generally planted deep—say from four to six inches. The covering at planting may not be too deep, but the grain should be placed at least this depth below the surface, as the lower root will then be deeper and more likely always to find plenty of moisture. On the prairie lands or wheat lands of this State, hoeing of corn may be generally dispensed with, as weeds will not generally grow much after the planting time, but thorough and frequent cultivation with the cultivator or horse hoe should be resorted to both as a means of introducing moisture and fertilizers from the air, and thus stimulate the growth of the corn and prepare the soil for the ensuing crop of wheat. We know that wheat farmers are generally averse to being troubled with summer crops, and have very generally pretty strongly settled opinions that they will not pay. But we can very well remember the day when they thought summer-fallowing was unnecessary—in fact work thrown away—that the true way to make wheat-growing pay was to get the seed in with the least labor possible, and the nearer the labor of seeding and harvesting could be brought together, the more clear money would result. Necessity has pretty fully exploded these ideas of wheat-growing, and it is now generally conceded that the greater the amount of cultivation the soil undergoes, the more to the acre and the more profit to the owner. Now, our suggestion to raise corn on wheat land is in the interest of more thorough cultivation and double pay for such cultivation. It looks to two crops instead of one from the same land, with less exhaustion of fertility than results from a single crop produced by poor cultivation. We are satisfied that if grain farmers would try the experiment they would meet with satisfactory results.

## FALSE IMPRESSIONS REGARDING CALIFORNIA.

California is so far removed from the center of population and government of this country, and has been so recently known only as a crude mining community, where the daring and courageous elements only come, that many false impressions have fastened themselves upon a large majority of those who have never visited the Coast. It is always a matter of surprise to an Eastern person coming to the coast for the first time, to find that the early and hardy endurance of the pioneer has been and is now fostering a spirit of intelligence; and that nowhere in the entire land are the arts and sciences so universally acquainted with. The false impressions that many Eastern people have are forcibly outlined as follows in the *Commercial Herald*:

The commercial, financial, social, and hygienic condition of this State, and especially of San Francisco, is little known to average Americans on the other side of the mountains. The great newspapers and news associations publish little concerning California, excepting when there is a chance of saying something bad about it. A murder, a defalcation, or a railroad accident, a foolish speech by a worthless communist, or anything that reflects disgrace on us, or would tend to make prudent people avoid California as they would a moral hell, and San Francisco as his hottest depths, is published far and wide, with grossly exaggerated and sensational headlines. Our merchants are popularly supposed to be mere serfs of the railroad, bound to do their selfish bidding, and land over, from time to time, the larger share of their profits. Our farmers are supposed to be even worse off. Every grower, metaphorically speaking, our people make for this purpose of returning some supposed share, is accepted abroad as a mild and cautious statement of fact. Strangers to California picture us as two large classes—one of struggling victims of monopoly, and the other of criminals and communists. If a railroad accident occurs, they forget the worse and more frequent disasters which occur in their own States, and conclude that it would be wanton recklessness of life to travel on a California road. If a farmer is murdered by an insane or drunken discharged laborer, they conclude that no man's life is safe amongst us.—*San Diego Union.*

## VARIED RESOURCES OF CALIFORNIA.

A writer in a recent issue of the *Weekly Chronicle* of this city, in the course of a valuable and graphic description of the resources of our State, says:

No part of the world of the same area can show such a list of native products, or such possibilities of production and development. Were all the rest of the world, by some condition of nature, suddenly rendered unproductive, or otherwise placed beyond our reach, this State could supply everything necessary for subsistence, for use, or for ornament to which civilization is now accustomed. No region, therefore, can be made so independent or so self-supporting as California. We raise everything of which valuable textile fabrics are made—cotton, wool, fax, jute, hemp, and silk. We have already several woolen mills, and a mill for the making of the coarse cotton cloth is about to be established. Our iron mines will soon furnish material for all kinds of hardware which we care to manufacture on this coast. Nail works have already been established in Oakland, and works for the manufacture of steel will be erected in the spring. Such portion of our gold and silver as is not mined or exported in the form of bullion, is made into tasteful ornaments in our own workshops. Our minor minerals are either utilized in our manufactures, or exported, returning to the State in other forms of wealth. No State can carry on manufactures more cheaply when the relations of capital and labor are more carefully adjusted. Our streams in the Coast Range and the Sierra furnish abundant power, and are not, as in the East, frozen for half the year. Our climate stimulates physical exertion, and makes labor comfortable and easy. All the wants of the laborer can be easily supplied. Food is abundant, cheap, and wholesome, and living inexpensive, on account of the mildness of the climate.

## NICOLL, The Tailor.



## JUST RECEIVED

A Fine Assortment of Foreign and Domestic  
Woolens for this Season.

## CALL AND SEE OUR NEW PATTERNS!

Suits to order, from ..... \$20 00  
Pants to order, from ..... 5 00  
Overcoats to order, from ..... 20 00

Also—To accommodate our numerous  
Country Patrons visiting the city for a  
short time, I have secured a Splendid Stock of

MEN'S, BOYS' AND CHILDREN'S  
READY-MADE

## SUITS AND OVERCOATS.

Manufactured by Ourselves, after the Most  
Approved and Latest Styles, in  
Custom-Made Patterns.

WELL CUT, WELL MADE, STYLISH AND  
CHEAP.

You will do well to inspect before  
purchasing elsewhere.

CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

## NICOLL, The Tailor,

PHILAN'S BUILDING,

816 & 818 Market Street,

SAN FRANCISCO.

BRANCH STORES IN ALL PRINCIPAL CITIES.

## PRESCOTT &amp; CO.,

PROPRIETORS OF

## Queen City Market,

DEALER IN ALL KINDS OF

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED  
MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Cheapest Eastern Hams, Bacon, Lard and  
Foreign Sausages of all kinds.

CORNEED BEEF AND PORK FOR SALE BY  
THE BARREL.

1164-1158 Market St., and 6-8 Taylor St.

## EASTON &amp; ELDRIDGE,

REAL ESTATE AGENTS,

HOUSE BROKERS AND AUCTIONEERS,  
Office & Store-room, No. 22 Montgomery St.

TUESDAY,

TUESDAY, MAY 22, 1883,  
AT 11 O'CLOCK A. M.,

## At PLATT'S HALL,

Montgomery street, near Bush,

—WE WILL SELL—

By Order Bank of San Francisco,

POSITIVE SALE,  
AT AUCTION.

—OF THE—

HOLLY PARK  
PROPERTY,

—IN—

Large Subdivisions,

—AND ON—

EASY TERMS OF PAYMENT,

—IN—

Lots to Suit Buyers.

## SPECIAL NOTICE.

This Magnificent Estate is located in what must be the very center of the city in time to come, at the present terminus of the Mission Street car line, and within two blocks of the Valencia Street cable road terminus, has a gentle slope to the east; a fine sunny exposure and drainage in fact. The Spring Valley Water Company have a wonderful and valuable property, insuring an unlimited supply of water. Fine building sites, commanding view and surrounded with schools and churches, only 30 minutes from Kearny street, and accessible by City Railroad or Valencia Street cable road for five cent fare from the former's any part of the city.

No grading to be done and ready for immediate improvements.

Holly Park of four acres (more or less) on this tract has been dedicated and devoted to the city for the special purpose of a public park forever, and greatly adds to the value of this property, making it a most attractive spot for private residence.

There can be no question as to the value of this elegant estate. The growth of the city is south and west, and the only outlet is directly past this property. Now is the time to secure a large block of land, in the direct line of improvement, at low prices, and we confidently invite the attention of all buyers to this attractive offering.

Blocks all staked and streets marked. Don't fail to see this property before the day of sale, and mark on your Catalogue how you may desire to purchase. The sale is absolute, and every lot will be sold to close the affairs of the Bank of San Francisco, in liquidation. Sale will continue until the entire Catalogue is disposed of.

## TITLE ABSOLUTELY PERFECT!

The Bank will furnish a full and complete abstract up to the hour of sale.

Parties desiring to look at the land will find on the ground a representation of our firm, who will give all desired information.

## REMEMBER

This Land must be Sold!

Savings Banks Pay 4 Per Cent. This  
Land will Pay 100 Per Cent. Before  
the Notes Mature.

LONG CREDIT!  
Easy Terms!

One-third Cash. Balance in one and  
two years. Interest, 8 per cent. In-  
cluding Taxes.

Ten days allowed for search. Principal and interest payable in United States gold coin. Acts of sale at purchaser's expense. Deposits will be required on all purchases at full of the balance.

On all purchases under \$1,000, twenty per cent; on all purchases over \$1,000, ten per cent deposit. Balance of cash payable on delivery of deed, and if not so paid (unless for defect of title), then satisfaction to be furnished to the sale to be void.

Catalogues, maps and diagrams are now ready at our address, which will be mailed to any address on application.

Sale, Tuesday, May 22d, 1883,  
AT PLATT'S HALL.

For further particulars, inspect sale and all details apply to

EASTON & ELDRIDGE,

Real Estate Agents, Auctioneers and House Brokers,  
22 Montgomery St., opp. Eddy House.



# SAN JOSE.

The *Mercury* has the following concerning the outlook of the Garden City of the Pacific Coast: "Never in the history of San Jose has the outlook for the future been as promising as at the present time."

And really but few cities in the United States—no doubt if there are any—can make a better showing, all things considered; or offer better inducements to seekers after health, happiness and desirable homes, than San Jose.

Suppose we take a brief inventory of our assets—not for our San Jose readers, for they are all familiar with the matter; but for the information of many strangers visiting our shores, who are enjoying their escape from the rigors of an Eastern winter, and are looking, perhaps, for some harbor of refuge in which to anchor their barques, and make their future homes. And also as a sort of beacon light to the thousands who have never yet tasted the delights of this glorious country and climate.

In the first place we will enumerate our principal public improvements belonging exclusively to the city:

Five public school buildings valued with their lots at not less than \$125,000, and employing 45 teachers.

Forty miles of graded streets, exclusive of the semi-mile avenue, constructed at a cost of \$40,000 and leading to the City Reservation, of 400 acres, in the hills.

Three public parks—one, the Reservation mentioned above, embracing some of the mildest and most charming natural scenery in the State, and a favorite place of resort. Another, Washington square, of 30 acres, in the center of which is located the State Normal School building, costing \$150,000. And the other, St. James, a little gem of a park, of about eight acres, located near the center of the city.

A paid fire department, with two fine fire steamers, hook and ladder truck, hose cart, and all the necessary appliances for extinguishing fires; together with engine-houses for the proper storage of the same.

A main sewer of brick, five feet in diameter, and 6,061½ feet in length; a brick sewer four and one-half by three feet in size, 6,325 feet in length; 1,502 lineal feet of railroad sewer, and 26,588 lineal feet of open sewer ditch, or 40,685½ feet in all, and costing \$92,573.

A city hall, (nothing to brag of), with city prison in the rear; the former containing Treasurer's office, office city clerk, common council room, city justice's court room, office of chief of police, room for one fire steamer, etc.

River improvement valued at some \$40,000; a well-appointed city cemetery, etc. These may be set down as the principal items of city property, which are all paid for, and the city has no indebtedness of any kind.

Now as to our assets in private property of a public character: We have a Court House and jail, the finest in the State, costing \$300,000; city water-works costing about \$600,000; a double system of city gas works costing not less than half a million; telegraph lines out-reaching to all parts of the world; a telephone system connected with Santa Clara, Saratoga, Los Gatos, and the Lick Observatory on Mount Hamilton; electric light trucks, with the streets partly lighted by electricity from one of the finest electric light towers in the world; a dozen or more churches of various denominations; several fine private schools; one, the college of Notre Dame, with buildings and grounds costing about half a million dollars; five lines of horse-railroad, all well equipped; connection with San Francisco by three lines of railroad, and three daily papers of average excellence and ability.

We might add this list, but this is sufficient, coupled with the fact of our "glorious climate," already mentioned, to emphasize the oft-repeated assertion, that San Jose stands unrivalled among the cities of the Pacific Coast in point of attraction for strangers from other lands, or from other portions of our own country seeking a place of abode.

## A FINE HARBOR.

The *Battle Mountain Record* remarks that a ranch of any kind in Battle county has big horses, and in many instances they are built much better than the farmer's own horse. "The largest horse in that county will hold 5000 pounds of hay, and 280 horses can be eating at the same time, or it will hold 4,000 tons of hay, and 4,000 sheep can be feeding at the same time. An eight horse team can turn around inside of it."

## THE WINE INDUSTRY.

The Surveyor-General's report for 1881-2 shows the acreage in vines on June 30, 1882, to be 101,031 acres. The same source gives the acreage on June 30, 1881, to be 75,131 acres. This is an increase of more than 34 per cent for one year, and it suggests the question, "Will the acreage planted to vines increase as fast in the future, and if so, what effect will this increase have on the price of grapes?" There are hundreds of thousands of acres of land in this State that would grow good grapes, and it seems to us that as long as grape-growing is as profitable as it now is, just as long will new vineyards be planted. The demand for grapes and wine is increasing, but at the present rate of increase in the number of vines planted, it is evident that the demand for grapes must be satisfied in the near future. That is, the demand for grapes at present prices. But whether California can more than supply the demand for grapes in the future, it is hard to say. Wheat has long been raised in this State, at a profit not to exceed ten dollars per acre. The profit on an acre of vines at present prices, after the seventh year, at low figures, is \$75 per acre. The profits of an acre of wheat for ten years is, say \$100. The profit of an acre of vines for ten years is \$750, counting grapes at \$25 per ton. If wheat pays at ten dollars profit per acre for an average of ten years, is there not a wide margin for the price of grapes to drop in? During the past year choice table grapes were worth \$50 per ton to ship East, and it is said by those who know, that our fruit trade with the East is only in its infancy. These would then appear to be the outlets for our grape yield. The shortage in the European markets, caused by the death of the French and German vineyards; the Eastern demand for table grapes, which is almost unlimited; and the possibility that when wine becomes cheaper, it will take the place as a drink that beer now holds. Wine must grow

## VALUE OF OUR CLIMATE.

It has become the fashion with certain newspaper men in the northern part of the State and of Eastern correspondents to sneer at the journals of Southern California because they put so high an estimate on the value of their unsurpassable climate. We read frequently that people in buying land here for \$100 an acre, pay \$25 for the soil and \$75 for the climate. Well there is, perhaps, a great deal of truth in that declaration. Let us put it in this way: What would the land in this admirable region be worth without the climate? It is the climate that enables us to grow luxuriantly all the semi-tropical productions and many of the tropical. It is the climate that makes the berries of our vines richer than those produced in more rigorous temperatures, and gives them qualities which contribute to impart to our wines that delicious bouquet which characterizes the vintage of the south of France. It is the climate that makes our section a sanitarium for constitutions broken down in the less favored parts of the Union, and which gives an increased lease of life to all who temperately enjoy it. Indeed, to sum the whole matter up, if our climate was left out as a factor in the resources of Southern California, there would be no more attraction here for the rich or poor man, for the invalid who longs to get rid of his maladies or the healthy man who wishes to prolong his years, or for those people who are possessed of wealth and desire to enjoy the richest gifts of nature, rendered richer and more enjoyable by the hand of art than Washington Territory or Oregon offers. Climate, therefore, is the very basis of our prosperity. It is that which makes those who have lived here never wish to live elsewhere, and which is bringing to us the choicest citizens of the rest of the Union and of foreign countries. We may well be proud of our climate. Without it we would be nothing with it we can be everything. It is the Ponce-de-Leon

## MOUNTAIN NOTES.

The repeated predictions of the *Independent* that an era of prosperity would unhappily dawn upon the mining counties east of the San Joaquin valley are beginning to be verified. A few years ago farming and fruit culture in the mountain districts was at a discount, and the owners of little ranches could hardly have sold their claims at any price; but now there is altogether a different condition of things. Since settlers have obtained Government titles to their little farms, few, if any, are for sale, and all are held at high values. In former years, before even limited experiments in farming were attempted, much of the light and shallow soil in the little valleys is well adapted to fruit culture. In conversation yesterday, a gentleman from San Andreas stated to this city that the farming prospect now is more encouraging than at any time for many years past. Instead of the people manifesting discontentment and a desire to seek homes elsewhere, some who left the mountain regions years ago are returning to take up their permanent abodes. Herein lies much of the pasture in the mountains has been appropriated by the owners of flocks of sheep and herds of cattle in the valleys, but all that will now be changed, and the profits derived from that source reaped in the future by the farmers and stock raisers in the mining counties thousands. While there are immense areas of land in Amador, Calaveras, Alpine, Tuolumne, and Mariposa counties so abruptly mentioned as to be inaccessible to the plow, yet there are of great value as stock ranges, and will undoubtedly be more and more utilized as such year after year by the people residing in adjacent sections, thus barring out predatory hordes of marauders and annually adding to the revenues of the respective counties from an important source of wealth within their own limits. Instead of the mountain counties being ultimately peopled by Chinese and Digger Indians, as many false prophets have predicted they would be, we may expect to witness, in a few years at furthest, a spectacle of busy life in the mountain counties, far transcending the most animated period of placer mining. Thriving villages where the sound of the pickaxe has not been heard for a quarter of a century, thousands of flourishing orchards, vineyards far exceeding in extent and value the best in France, and a large and happy white population enjoying the wealth accumulated by their own persevering industry and frugal management, will soon appear. That a new industrial era in the mountain counties has already been inaugurated, is strikingly manifested by numerous evidences of fresh life and renewed vigor in the various channels of business and productive pursuits. We think it may be regarded as a reasonable and safe conclusion that that at no remote day, the counties above named, more particularly Calaveras and Tuolumne, will rival in general prosperity, any other sections of the State. Their fruit-producing capabilities alone are almost beyond computation.—*Stockton Independent*.

## A FAVORED COUNTY.

Tehama county has a deserved reputation for being a safe county for farmers. The *Santa Weekly Times* says:

Crops rarely fail, and in the worst years we have not experienced a total failure. Tehama county is blessed with varied productive interests, and in the worst years it is a good producer of some of the necessities of life. Sheep by the million range upon its thousand hills; cattle, sheep, and fat, horse and a fattening harbor; the majestic pine, with its Indian residence, towers upon our mountain tops, ready for the woodman's axe to convert it into beautiful homes. Grain springs like magic from rafter and plow, from bottom land and hillside; the fruit of this favored belt is luscious, rich, and beautiful in yield, and in the low land, bordering our pure, crystal streams, beautiful exotics, tropical fruits, and succulent vegetables thrive and are prolific. Tehama is indeed a county favored by nature, and men both do much to profit by the bounty of the gift of good gifts. The county has been settled by a progressive and energetic people—a people competent to reap the harvest of nature, and at the same time to the fore in human enterprise.

## SUTTER'S FORT.

The old adobe building on Twenty-eighth and K street, which is all that is left of Sutter's fort, and the only Sacramento relic of days previous to the gold discovery, is fast falling to pieces. It will be but a comparatively short time until it will be a thing of the past, and all that will remain will be some of the adobe blocks deposited in culverts. The walls are crumbled, and general dissolution permeates the entire building. The windows, doors, and stairs are all gone. Of late the lower portion has been used to shelter some young stock from the inclement weather. There was some talk a few years ago of the Pioneer's preserving the place, but it is now too far gone. The pretty green knoll on which it stands is now the property of a resident of Chicago. The remains and relic-hunters have begun to carry away pieces of the walls, the middle portion of the walls being all that remains of the original building erected by General Sutter.—*Record-Union*.



GIANT'S GAP, American River.



AMERICAN RIVER.

## SCENES IN NORTH-EASTERN CALIFORNIA.

cheap in the near future. The bulk of vines planted is of the wine-producing varieties. Then the wine demand will be the first to be satisfied. When this happens, the heavy buyers of wines will select only the best qualities, leaving a large bulk of inferior vines to be disposed of, which can be done by a fall in their price only. When wine is sold for fifteen cents per gallon it will be cheaper than beer, and must eventually take its place, and it seems that the demand for cheap wine will then be unlimited. That it will pay to raise grapes when wine sells for but fifteen cents per gallon, can be proved to anyone, we think. But vineyards must be cultivated in better style than they are now to make vine-growing profitable when wine is worth but fifteen cents per gallon. So long as the profit in wine-growing is so great as it now is, we can expect no great improvement in the culture of the vine; for now anything that looks like grapes will sell, and anything that looks like wine will find a market, without regard to their quality. But the time is not far away when the careful cultivation of the vine will pay, and that time will be when the demand for wine is satisfied. Then he that raises the finest fruit and makes the best wine is the one that will sell his produce for the most profit. We have no great fear of the grape industry being overdone, but we do fear that many a vine that now sees a fortune in the business, will be sadly disappointed before he gathers in that fortune. It takes mere skill and intelligence to produce good wine than to produce any other luxury or necessity that man uses. Some localities will never yield good wine, but may produce good raisins or table grapes. Each locality must be studied as to its fitness for certain varieties of grapes, and each variety of grapes must be studied as to its fitness for certain localities. There will be future in the vineyard business just as there is in dairying, chicken-raising and fruit growing. But the intelligent and careful man can expect as large a profit from grape growing as from any other product of the soil, and can expect it for centuries to come.—*Sacramento Index*.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 420 Sansome St., Halleck Building.

ISSUED MONTHLY

Terms .....\$2 per Annum.

SAN FRANCISCO, MAY, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent and industrious farmers to settle in California.

## TABLE OF CONTENTS:

First Page.—San Luis Obispo County.  
Second Page.—San Luis Obispo County, Continued.  
Third Page.—Lake County.  
Fourth Page.—Lake County, Continued.—The Collico Mines—Growing Liquorice.  
Fifth Page.—Citrus Fruit-Producing Lands.—Dividing Large Ranches.—A Sensible Suggestion.—Real Estate.—Southern California Apples.  
Sixth Page.—The Santa Ana Valley.—Bonanza Flood's Reach.—California as a Corn-Growing State.—False Impressions Regarding California.—Varied Resources of California.  
Seventh Page.—San Jose.—The Wine Industry.—Value of our Climate.—Mountain Homes.—A Favored County.  
Eighth Page.—One of the Ways to Get a Start in California.—Plenty of Government Land.—Growing Sweet Corn.  
Ninth Page.—The Foot-hills of the Sierras.  
Tenth Page.—Salmon Fisheries.—Sugar Cane Culture.—Ione Valley.—French Milk.  
Eleventh Page.—Gold Deposit on the Klamath river Bed.—Our Fruit Canopy.—Clear Lake.—Diverside.  
Twelfth Page.—The Wood River Country.—The Backbone Mining District.—A Thriving County.—The Foot-hill Lands.  
Thirteenth Page.—Fruit Lands.—Will Wheat Continue a Paying Crop?—Its Importance.  
Fourteenth Page.—The Products of Grape Culture.—The Silk Industry.—Cost of Building Materials.—A Fruit Region.  
Fifteenth Page.—The Garcia Mining District.—A New Enterprise in Fresno.—The Redington Quick-silver Mine.—Product of one acre.  
Sixteenth Page.—Mining and milling in 1882.—Sonoma county.—A Wheat-Growing River.—Sierra Valley.—The Wood Business of Truckee Basin.

## SAMPLE COPY.

We are receiving, every week, requests for sample copies. The postage on this paper is two cents. Parties desiring a sample copy will be sure to receive one by remitting 20 cents; this amount will pay for the sample number and the postage.

## ONE OF THE WAYS TO GET A START IN CALIFORNIA.

The business of wood-chopping and lumbering is carried on very extensively in portions of this State. We frequently see notices, in the newspapers published in the mountain sections, particularly along the line of the Central Pacific Railroad, in which contractors ask for wood-choppers. Now, inasmuch as quite a large percentage of the immigrants arriving here hail from the Eastern States (a country where nearly every youth, living on a farm, is early trained in handling the axe), and are looking for work, they would do well to make inquiries concerning the chances of engaging in the business of wood-chopping. Enormous quantities of wood are cut, annually, between Reno, in the State of Nevada, and Auburn, California, for the railroad. Good choppers are in constant demand in this and other wood and lumbering sections of California.

The town of Truckee, containing a population of something over 2,500, is located in the heart of a timber belt, whose virgin forests extend in every direction. Its saw-mills manufactured the lumber of which the snow-sheds of the Sierra Nevada mountains, and the ties and bridge timbers of the Central Pacific were made. The Truckee wood business is of enormous capacity. One firm, alone, has contracts to furnish 10,000 cords of wood annually during the next ten years. Immense quantities are also consumed in this district in making charcoal. Since the completion of the Southern Pacific Railroad, Truckee's lumber interest has received a new impetus. Its annual trade with Arizona, New Mexico and adjoining sections of country, is becoming enormous. The miners, railroads and the rapidly-growing towns require millions of feet of lumber yearly. All the lumber which is used in that region of country penetrated and opened up by the Southern Pacific Railroad is supplied

by California forests. There are other localities, on or near the summit of the Sierra Nevada mountains, where wood-chopping and lumbering are carried on to a large extent. Immense quantities of wood and timber are being constantly shipped to this city, from the Russian river country, by the North Pacific Coast Railroad. We might name Tehama, Shasta, Butte, Humboldt, Lassen and other northern counties where wood-chopping and lumbering are largely pursued. This business is greatly on the increase in nearly every timber section of the Pacific Coast. There are immense forest belts yet untouched on account of a lack of railroad facilities for transportation, but this will soon be remedied, as we observe, from our exchanges, that narrow-gauge roads are being constructed, in several places, for the purpose of connecting with the main trunk lines. The demand for California lumber from South America, Australia and China has increased, wonderfully, within a brief period. In a few years the lumber and wood business of this State and coast will require thousands of men, where only hundreds are now wanted.

It will be recollected that the first purchase of redwood timber lands, for Eastern account, by a Buffalo syndicate, took place last summer. That event has since created quite a demand among some of our city capitalists. It is stated that, very recently, Messrs. Paxton & Burtis, bankers of Nevada, in conjunction with ex-Governor Low, Manager of the Anglo-Californian Bank, in this city, purchased about 7,000 acres on Eel river, Humboldt county, known as the Ralston tract. The price paid is reported at \$100,000. This syndicate proposes to build a railway from their tract to tide-water at Humboldt Bay, a distance of some twenty miles. Prominent lumbermen of Chicago and Detroit have had representatives here at various times during the past year, with a view to ultimately using redwood for finishing work in place of white pine. Ex-President Fillmore's son is one of the Buffalo syndicate, which is said to have made one of the most valuable selections in the State.

In this connection, we will add, that in close proximity to the timber regions of our State there are mining districts where large quantities of silver and gold are taken out of the earth annually. There are, also, many small valleys in the mountain regions which are adapted to farming purposes on a small scale. We mention these facts for the benefit of those who may be laboring in their minds as to whether, if they should go into the timber sections, they could get constant employment. In the event of work becoming slack in the bush, we believe they could easily find employment in the mines, or on ranches near at hand, until work revived in the timber sections. Or, what would be still better, they could, with the money they could save, purchase or take up a few acres of foot-hill or mountain valley land, and commence farming for themselves. There are innumerable instances on record of men becoming independent in a few years' time, who commenced in the way we have described. There are thousands now working in this way, in the hope of having, some day, homes of their own.

We think we have succeeded in pointing out one of the ways, at least, by which men of pluck and perseverance can get a start in California.

## THE CROP OUTLOOK.

We learn, from reliable sources, that the acreage of cereals this year is much greater in nearly every grain-growing district of the State than ever before, and the distribution of moisture has, on the whole, been remarkably even for California. There are always spots where the rainfall is light, but these areas are comparatively small this year. A careful study of all the information before us, touching the condition and prospects of crops, warrants the conclusion that we shall have a good harvest of the cereals for 1883, and a year of prosperity in every department of agriculture in the State. Every branch of business must necessarily prosper, and all classes, from the millionaire to the laborer, will reap great benefits.

## THE PACIFIC COAST LAND BUREAU.

We understand that the management of this Bureau are about to take charge of the Fresno irrigated lands of this justly celebrated locality. It is claimed that this section for fruit and vines is not excelled in all California.

## PLENTY OF GOVERNMENT LAND.

There is an abundance of Government land still open in California to pre-emption and homestead purposes. Fringing the Sierra Nevada mountains, for several hundred miles, there stretches a broad belt of hills upon which can be grown all the grain, fruit, and vegetables that our lower valleys can produce. And it is a safe calculation to make, that fully three-fifths of this territory is Government land. In Kern county, it is stated that there are over 300,000 acres of unsurveyed land that is subject to entry. Much of it is as fine land as ever the sun shone on. And yet it is doubtful if there are more than a few persons in the whole county aware of the fact. On this very theme the Kern county *Californian* said, not long ago, that a very erroneous and unfounded statement had been circulated about, to the effect that all the land which is good for anything had been taken up by a few large land-holders. This being the condition of affairs in Kern county, concerning the available lands, it is quite as likely to be the same in other counties of the State.

Some time ago the *Salinas Index* stated that there were still thousands of acres of productive land in Monterey county still belonging to the Government. The climate in the section where these lands are situated is very mild. Timber for ordinary purposes is plentiful. Those in search of homes will find chances to purchase land in many other counties which possess advantages equally as good as those we have named.

There are innumerable places, even in the mountains, at an altitude of 1,000 feet, where vineyards flourish. If we could only interest the right class of people, there are homes for them all. It might be necessary, of course, to expend a little time and patience in searching for them, but, when found, they would prove to be much better homes than the hill and mountain lands of half of the civilized world have furnished.

There is no fact to which California needs to be more thoroughly awakened than that she should begin to look after her immigration. Our neighboring State, Oregon, and others more remote—have set us examples which we should not be slow to imitate. And they are daily reaping the benefits of their intelligent efforts by attracting a large and valuable immigration. Many good people give our State the go-by, simply because we make no earnest effort to bring them here. We have done, and are still doing, all in our power, by the publication of this journal, to make known the fact that all California needs, in order to become a prosperous State, is a large influx of intelligent and industrious immigrants.

## PROFITS OF MINING.

It is stated that no industry in the United States can show, in the same period of time, a corresponding increase on the capital invested, as that of mining. From the most reliable statistics, the *Mining World*, published in New York City, learns that, during the 30 years previous to 1880, there was expended, in the purchase of mines and all expenses arising from the development of them, \$700,000,000. The cash returns for this expenditure for the same time netted \$2,200,000,000, thus giving an actual profit of nearly 300 per cent. of the investment made.

The journal from which we have gathered these facts, closes its article by asking this question: Who, looking candidly in the face of such facts, can assert that legitimate mining is not profitable?

## A SEASON OF PROSPERITY.

It is estimated that there has been sown, at least, one-fourth more acres of grain this season than last year. And unless all of nature's signs fail, we can look forward to a prolonged season of prosperity. California possesses an area of territory that offers sustenance, homes and a prosperous future to several million of people. The State has about 100,000,000 acres of land, and a population of a million. Even at the present slow rate of increase, in a few years, we shall witness a degree of prosperity almost unknown in any other community.

## OUR RESOURCES.

The resources of our State are still largely in the rough and undeveloped. In comparison with other countries, her population is very small. Therefore it will be seen that the great need of California is an increased population.

## GROWING SWEET CORN.

The *Grass Valley Tidings*, recently, had an article in which it was stated that it has been demonstrated, by many farmers in its vicinity, that sweet corn is a profitable crop in Nevada county. There are many other sections in the State where it is raised in abundance. Now, as large quantities of this article of canned goods are being constantly imported to this State from the East, the question is often asked why we do not provide the necessary facilities for canning, at least, enough for home consumption. It certainly becomes a very important inquiry, when we take into consideration the fact that thousands of acres are already devoted to this kind of farming, and that a large portion of the area of the cultivated lands of the entire State is especially adapted to the growth of the sugar corn. This State imports a large percentage of the canned corn used here from another side of the Rocky Mountains, where it should no longer be the case. The little State of Maine has 61 corn establishments, with an annual production of about 11,350,000 cans, while but very little attention is paid to this branch of business here. This industry gives employment to nearly 10,000 persons in that State. Here then is an example worthy of our emulation. If the Old Pine Tree State can make such a showing, we think that, with all the superior advantages of climate and soil our State possesses, it could raise all the corn needed for home consumption and, in addition, do a large exporting business. There are many places in the corn-producing districts where this industry would prove highly profitable. Canning factories in these places would not only afford a home market for a large portion of the crop, almost at the very doors of the farmer, but they would also afford a field for remunerative labor to a large number of persons, and, in addition, prove an entering wedge for the establishment of other industries that would cause those districts to advance rapidly in wealth and importance. The work connected with the canning of these goods is not of a laborious kind. It is one of those occupations in which women and boys can be employed.

It should be the endeavor of our farmers to furnish everything in the eating line that can be grown or furnished. The nearer they come to this, the better and more prosperous will the State become. There should be no capital sent out of the State to purchase what can be produced in it.

## PERUVIAN BITTERS.

Elsewhere, in this number, will be found an advertisement, relating to this popular remedial agent to which we call special attention. For various nervous affections, as for example, neuralgia, headache, malarial diseases, dyspepsia, debility, etc. It has been pronounced one of the very best of remedies. There are good reasons why it should be so regarded. It is composed of ingredients known to possess great medicinal virtues; the principal one being the sulphate of quinine, prepared from the bark of the cinchona tree which is so highly valued in medicine. We learn that many physicians often recommend the Peruvian Bitters for the complaints we have named. They are prepared under the supervision of skillful doctors and chemists. We advise all who may require a pleasant beverage, a good appetizer, tonic and mild stimulant, to test the virtues of the Peruvian Bitters. Walmerding & Co. are the Sole Agents.

## SILK-WORM CULTURE.

We learn that in several sections of the State silk-worm culture is receiving quite an impetus. One gentleman, an Italian, in Amador county, has hatched out and is growing several million of workers of silk, in the shape of tiny silk-worms. He has also erected a building and machinery for the manufacture of silk by a new process.

## BUILDING ACTIVITY.

All indications point to a season of extraordinary building activity during the next few months in this city. During the last two years a great many improvements have been made in San Francisco, but from all that we can learn from reliable sources they are likely to be surpassed by those of 1883.

Californians should feel a pride in a publication which is doing so much for the State as this journal is, and send it to their friends.



THE FOOT-HILLS OF THE SIERRA.  
Her Great Crowning Glory.

(Written for THE RESOURCES OF CALIFORNIA, by James O. Reup.)

Many of the readers of the article in the April number, upon the subject of the foot-hills, have doubtless wondered how it has happened that so many of those who have embarked in the business of viticulture and fruit raising selected valley lands in preference, paying, in many cases, from one hundred to three hundred dollars per acre, when the region I have described was, much of it, open to pre-emption, and, at all events, could have been, and can now be purchased at from two and half to five dollars per acre.

To make a comprehensive explanation of this matter will be my present purpose, and, having made these prefatory remarks, I will at once to the subject under consideration.

As I stated at first, California, in 1849, was an almost unknown region, and certainly its tremendous resources were never so much as dreamed of by the early Catholic fathers, original Spanish and other settlers; those even who crossed the plains, in 1846, locating on the bottom lands of the rivers—the Rhodes family, Daylor and Robinson, settling upon the Cosumnes, at a point some twenty miles from Sutter's Fort, near the crossing of the old stage road from Sacramento to Drytown, Jackson and Mokelumne Hill.

The immigrants of 1849 went, in most cases, direct to the mines or foot-hills in search of gold alone. In fact, they had but one purpose, and that was to obtain the object of their efforts by washing it from the earth, and, having made their "pile," to return quickly as possible to the homes from whence they came, none scarcely having any idea of remaining here permanently. For several years afterwards, it was conceded by all, that California could never become an agricultural State, and as to viticulture, the man who proposed it, would have been looked upon as a fanatic of the very worst type. The whole Sacramento valley was supposed to be a vast and generally barren waste, while the San Joaquin was considered a miniature Sahara. The foot-hill region was not so much as thought of, except for gold washing; and even when such vegetables as potatoes, onions, tomatoes and turnips sold readily at 25 cents per pound, and a fair-sized watermelon was almost a legal tender at a couple of dollars, no one ever thought of raising them in the foot-hill towns, the whole supply coming from the bottom lands of the Sacramento.

Precedent is a terrible factor in human affairs, and, as every one knows, when once a doctrine has been promulgated by some eminent authority, and for a long period taken as gospel truth, everyone falls into line without giving it the least question, and thus it has followed that the whole civilized world has often gone on for years in continued error, and finally, when the real truth was shown up, mankind has marveled at its simplicity and at the absolute stupidity of their ancestors and themselves.

Thousands upon thousands of men are poor to-day who might have been immensely rich had they only have had the moral courage to think for themselves, and not, when the grand opportunity was theirs alone, to have blindly followed senseless precedent.

After awhile mining began to wane, and men were forced to look to other pursuits. Land was broken up, and from 60 to 100 bushels of grain to the acre the result. In such towns as Coloma, Placerville, Nevada, Grass Valley and Sonora several courageous souls were brave enough to face public opinion and plant a few peach stones, and when, four years later, the trees commenced to bear, such sights had never before been seen, people traveling hundreds of miles to gaze upon the great wonders, as they were called; every limb obliged to be propped up to keep from breaking down with its immense load, and absolutely thousands of peaches upon a single tree! Such unheard-of results stimulated production, and a few years later it was impossible to sell the fruit, as each town had a full supply; the cities of San Francisco, Sacramento, Stockton, and Marysville furnishing a market, but the cost of transportation absorbing more than the full proceeds. Between Sonoma, Napa, and Santa Clara valleys there was a cheap water communication, and it was to these localities, and for the foregoing reasons, the viticulturists and fruit-growers turned their attention.

The reader will bear in mind that thirty-five years have passed since the discovery of gold in this State, and since then there has been a great change. We now have several overland railroads, and will soon have more. Canning factories have multiplied, and fruit drying has become an art. The whole business of raising fruit, canning and drying it, has been reduced right down to the utmost simplicity, and it is only very lately that people have waked up to the great fact that California is destined to become the home of millions of the happiest and most prosperous people on earth. It has been discovered, too, very lately, that the foot-hill lands straight through, are the very best, possible, for grape and fruit-raising; that for this purpose they beat the richest valley lands two to one, and further, that the products are infinitely superior. This was indeed a revelation that, as I said before, no one had ever dreamed of. At New Castle, near their base, the most superb peaches, pears, plums, and strawberries have been raised, on land that, twenty-five years ago, would not have sold at 12½ cents an acre. At Auburn, in Placer county, Dr. Crandall has raised some of the finest fruit ever produced in America or any other country, while the viticultural products of Coloma, Placerville, and many other mountain towns are known far and near, and their fruit commands the very highest prices. The fruit raiser must not expect to sell his product in a ripe state to be eaten, but, on the contrary, to dry or can it. Canning factories and drying establishments are being started everywhere, and can be erected in the foothills just as well as in the valleys, and under such circumstances as these, there is no need of buying valley lands, especially when those I have alluded to are actually the best for the purpose. But besides all these reasons that I have enumerated there is still one more, far more potent than all the rest. It is this: water is very plentiful in the mountains, the rainfall being, in many localities, three times as great as in the valleys. This in a great measure does away with the necessity of irrigating, and as the weather is colder there during the rainy season, and the spring later in coming on, there is far less danger from frost, the trees not budding so soon as in the low lands.

Another great feature of this region is the absence of those desiccating north winds, so common to the valleys, and which sweep through them from one end of the State to the other, but scarcely ever reaching the altitude of the foothills.

Some fifteen years since there was a man at Mokelumne Hill who went down the river to a point near Lancha Plana, and having selected a piece of land then covered with chaparral, commenced to grub and clear it off. He was absolutely the laughing-stock of the community. He kept on, however, and having fenced his land, planted vines and trees, and for many years has had a most beautiful place, his fruit being of the very best quality, all of it finding a ready sale in this market, being brought hither from Galt, over the railroad.

In passing a shop window we often see pictures tacked up which appear to be nothing more than landscape views. We are told, however, that there are horses, dogs, cattle, houses, men, women, etc., plainly visible if we hunt for them. We look in vain, until some one, perhaps, points them out, and then we see them very plainly, and wonder how it was we could not discern them before. It is the same way with the foot-hills. People took it for granted that they were worthless, and would not think otherwise. Now, they can see the whole matter just as it is, and wonder how it could possibly have been they were such idiots.

There was, as I said before, a time when anything a person could raise would bring 25 cents a pound, with almost no limit to the demand, and yet men would go about prospecting for six dollar diggings, when they could positively have made \$50 per day raising vegetables.

To enumerate all that has been done in the viticultural line in the foot-hills, would be a task I have not time to undertake, even if I had the data; but it will suffice to state that, in all the old mining towns, there are gardens filled with every variety of tree, vine and shrub, and the yield is prodigious, while the quality is far above the valleys. The newly-arrived immigrant can prove the truth of this by visiting any of our mountain towns.

It is an old, and true saying, that he who would get rich, must make haste slowly; and

"be sure you are right and then go ahead" is, certainly, a most excellent motto.

It was this insane desire to get money, so prevalent even now (I do not mean wealth, but hard metallic gold), that completely blinded the eyes of the early comers. All any man need do is to go to work, fence in his land, plough, cultivate and plant, and see that he does it well. Keep on improving day after day, week after week, month after month and year after year. Neither thinking or caring about money (in a metallic sense), and the first thing he knows he will have a property worth tens of thousands of dollars, that he can convert into gold, if he desires, at any time. I will enumerate some of the products that can be raised in the foot-hills, and ask the reader to stop short, and him or herself consider the question, whether any other section, all things considered, can offer such grand and consummate advantages?

Apples, pears, plums, peaches, prunes, cherries, figs, nectarines, pomegranates, limes, lemons, oranges, every variety of grape, raisins, olives, apricots, citrons, strawberries, blackberries, gooseberries, whortleberries, barberries, raspberries, currants, together with almost every vegetable and cereal belonging to the temperate and semi-torrid zones. All the flowers of both Europe and America, and that too in the grandest profusion. Hundreds of rare plants, that can not be raised East on account of the shortness of the season, here grow to perfection. These are literal facts, and for some unaccountable reason are actually so apparent that people do not see them. It is no idle talk to say we are blessed as no people ever were before, but, on the contrary, is absolute truth. The son of the rich man, who will be heir to millions, does not realize his good fortune, and, in like manner, our senses are blinded. The fact is, this State is literally overflowing with luxuries that are common property, but, living right here, we take them as we do the supply of air and water. I consider that the man does not live who can overrate or overstate the grand resources, climatic advantages and natural luxuries that are the common property of every person, high or low, in the foot-hill portion of California; and further, I deem it to be the solemn duty of everyone to make these facts known. As I said in the commencement of the article in the April number, this State has no individuality of her own, there being but one California to this world, and her only counterpart that world itself.

When we once consider what might be, what countless comforts we all could easily have, how lavish and profuse nature has been, and then turn about and see how vainly and foolishly we follow after miserable, ignoble ends, is it a wonder the foot-hills have been lost sight of? Do not people always choose the longest road, the hardest method, and are we not ready at all times to go in a diametrically opposite direction to that which good, plain, common sense dictates?

Think how many there are who toil night and day almost, pay a frightful rent, go without sleep and proper food, in the vain attempt to eke out a miserable living in a large city, when one-quarter part the labor, expended upon a fruit ranch in the foot-hills of this State, would bring them plenty, comfort, peace of mind, and, better than all, a home, and with it total exemption from (I was going to say that almost sole cause of poverty), the rent-collector, who never fails to make his appearance upon the first of each month, demanding his money in advance.

Is it not time we cut loose from this disgraceful thralldom? Have we any right, social or moral, to inflict such a curse upon our children, even if we choose to submit to it ourselves? It is all nonsense, sheer, unadulterated nonsense for anyone to say the thing "cannot be done, it requires capital," etc., etc. It requires nothing scarcely but indomitable will and that immortal sentiment, *to do or die*. What do we do when war comes, or when shipwreck forces us to take to the boats or to a raft; or, in other words, when stern, uncompromising necessity brings us up with a round turn? I do say, and I declare it openly and above board, that the old residents of this State are the most ungrateful people, in some respects, that ever existed. Ungrateful, I mean to that God who has placed us all in such a position and amid so much natural wealth and hitherto unheard-of surroundings.

The writer, on the last day of 1882, went out

into a flower-garden in this city, amid three good square inches of snow, and picked a massive bouquet of twenty-seven different varieties of beautiful flowers, and sent it to the editor of a paper in Massachusetts; this, in the dead of winter. In such a winter as may not come again for fifty years. Think of a country where a party of ladies taking a sleigh ride amid fields of waving grain two feet high, could stop their team, hitch their horses to a post, and then, standing in three to four inches of snow, each pick, from an adjacent garden, a beautiful bouquet! Now this might have happened within six miles of the City Hall, if the parties could have improvised a sleigh. And thus it proves in this fair State that even the cold, bitter, rugged winter of other sections, becomes, like the ice cream of a hot summer day, a decided luxury—coming to us in a sort of mimic theatrical way at noon to-day, and vanishing again before daylight tomorrow.

I wonder what the residents of Wisconsin or Minnesota would think of such an one as I have described; and yet we take it all as merely a matter of course, as a sort of good joke played upon us by nature, simply to show she has not forgotten us, but as we are, Reader, how long will this continue? California has commenced to boom, and immigrants are pouring in. The great railroad and steamship line, from Oakland wharf to New Orleans and Europe, means business; and the foot-hills of California, although they will stand forever, probably just where they do now, will soon belong to other people, and our children and grandchildren, if we don't look sharp, will surely become the servants of those who shall then have become the possessors of the soil.

SAN FRANCISCO, May, 1883.

AN IMPORTANT REAL ESTATE SALE.

We desire to call special attention to an advertisement, in this issue, of the sale of choice lots, situated within the limits of this city. It rarely happens that such a favorable opportunity occurs for purchasing real estate so advantageously situated and on such easy terms. There can be no question but this property will, within a brief period, be in the very heart of San Francisco. It certainly presents great inducements to all buyers, especially those of small means. In our opinion, no safer or better investment can be made. This sale affords a rare chance of gratifying the wish of those who have long cherished a desire to possess homes of their own.

The sale to which we allude will be conducted by Easton & Eldridge, the well and favorably known real estate agents and auctioneers of this city.

MANUFACTURES.

That no country ever grew rich by agriculture alone is, we think, a sound proposition. Manufactures are needed also. It is through the solidarity of its industries that a nation prospers. Examples of the benefits which manufactures are working to the States of the South, for instance, are numerous. Here is one of the most striking: "Eleven years ago a number of Northern capitalists staked out a town in Alabama, and called it Birmingham. To-day the town has 10,000 inhabitants, and is drawing new residents at the rate of 500 a year. In the town, and its immediate vicinity, 7,000 persons are employed in coal mines and iron works." We commend this strong bit of information to the business men of Los Angeles.—*Los Angeles Mirror*.

AN IMMENSE LUMBERING SCHEME.

The Sacramento *Bee* intimates that some capitalists have in view an extensive lumbering enterprise in the northern part of the State. The finest body of pine timber in the Sierra Nevada Range is in the vicinity of Big Bend, on Pitt river, which has hitherto been deemed inaccessible for profitable milling. It is now proposed to open up this section to market, either by rafting the logs down that stream, or fluming to some point on the Sacramento river where mills will be erected.

WHEAT, WOOL, AND WINE.

In these articles, it is stated that California has, within the brief period of a dozen years, made exportations to the value of \$300,000,000. This would seem to indicate that the industries of the Golden State are gradually enlarging.



## SALMON FISHERIES.

The following interesting sketch, regarding the growth and extent of salmon fishing on the Sacramento, as well as the canning business, was written for the *Yolo Democrat*, by a correspondent signing himself "R. H. B." of Washington, Yolo county.

In the year 1849, when emigration was pouring into the State of California, amongst those coming were three young men from Connecticut, whose names were John Ayers, William Shailer, and Charles Chase, who probably were the first persons to cast a net into the beautiful waters of the Sacramento, for the purpose of taking salmon. This was in the fall of 1849. They brought with them, from the Connecticut river, a shad net, which, upon trial, was found to be too weak for so strong a fish as the salmon, so they looked about for something that would be suitable for the purpose. Every kind of twine was tried, until shoe thread was used, which, from that time until the present, has superseded everything else. In 1851 there was quite an increase; about this time parties left California for the East for the purpose of purchasing fishing tackle. Among them I may mention James Booker of Augusta, Maine, and William Fuller of New Haven, Conn., who brought out a large lot of nets which paid them well. In 1852 nets had increased until there were, in and about Sacramento, not less than sixty or seventy. The fishing was nearly all done within twelve miles of the city, although a few parties had ventured as far down the river as Rio Vista, long before the town was started. Among these I may mention John Scully, William Fuller, George Fuller and Fred Hofstead. These men (most of whom are now cold in death) were probably the first persons who fished at that point. The business did not increase much for a few years. Mr. Wm. Hume, the pioneer in the canning business, commenced this year. In 1853 fishing was carried on all along the river below the city, but the most was done in front of the city, at what was called the Mexican drift, at one time.

The fishermen fished for the markets of San Francisco and Sacramento, there being no other market for their produce, except when there was a large run; then the surplus was sold to the salters, among whom was George Cooper, (now doing business in Sacramento), and Wm. Frisbie, who died some time since. The business did not increase a great deal from this time until about the time of the building of the railroad; as that advanced there was a greater demand for fish, which demand increased until the road was completed. In 1863 the Hume Bros. started their first cannery in the town of Washington, Yolo county, two blocks from the railroad bridge. Soon after they started salmon seemed to have given out, as they grew very scarce, and, in consequence, Wm. Hume started for the Columbia river, and in 1865 moved his business to that point. About a year from that time the salmon appeared again in large numbers, and the run has been, at times, very heavy. In 1869 they were so plentiful that not one-tenth of the catch could be sold. The run has continued to be very good most of the seasons since. In 1869 there were about 200 boats scattered along the river, from Sacramento to Collinsville. The number did not increase much until about 1875, when A. Booth started a cannery at or near Collinsville. Canneries were started from that time, until now there are not less than eighteen or twenty which are putting up salmon. Within the last five years the increase in the number of boats has been very great, not less than 900 boats will be in use this year. The amount of salmon canned in the State, from the Sacramento river, in 1882 was 204,376 cases, of four dozen cans each. The number of men employed in catching salmon on the Sacramento river this year will amount to over 2,000, not counting the great numbers employed in the canneries. From these figures you can form some idea of the vast importance of the salmon interest to the State of California.

## SUGAR CANE CULTURE.

Mr. T. J. Barr, of this city, called at the *Enterprise* office and gave us some facts in regard to the sugar cane. He was for a number of years engaged in its cultivation in the Southern States, and proposes to go into the business here. He brought with him samples of syrup made from Amber and Honduras varieties of the cane raised near St. Helena, the past year, which contain, respectively, 70 and 76 per cent. of sugar, and of fine flavor. The Amber will yield from 150 to 225 gallons of syrup in the acre, and the Honduras from 400 to 500 gallons, which readily sells at from 75 cents up. The cane ripens very rapidly, maturing in 60 to 90 days from planting. The stalks and seeds possess valuable fattening qualities, and are said to be superior to corn. An acre of cane will produce about 35 bushels of seed, which sells for about 75 cents per bushel. Mr. Barr says he will put in some 10 acres this year, and put up machinery for making syrup. The samples above alluded to can be seen at this office, together with stalks of cane and the seed. Mr. B. will give further information to those calling on him, and furnish seed to anyone who may wish to experiment.—*Herald-Sun* Enterprise.

## IONE VALLEY.

This valley is located about 40 miles south-east of Sacramento City, and is bordered on the east by the foothills of the Sierra Nevada mountains. While on the west, north, and south, the valley is surrounded by low, rolling hills. Being located as it is, this valley is seldom visited by the heavy north winds that occasionally are felt in the larger valleys of the State. Ione city, the principal town of the valley, has a population of about 700, and is located on the eastern border of the valley, close up to the mountains, and at the terminus of the Amador Branch Railroad, which brings the valley in direct communication with all the markets of the coast.

The climate of this valley cannot be excelled; it is healthy and invigorating. The soil is the richest in the State, and capable of producing all kinds of fruit and vegetables, without irrigation. Ione City is furnished with a good supply of mountain water, which is distributed through the principal streets in pipes, and can be used for sprinkling streets and irrigating flower-gardens, as well as for other purposes. Here is also located the finest brick school building in the county, and several large and commodious churches.

This valley is almost proof against drouth, and good fruit, vegetable, and vineyard land is not high, considering its fertility and richness, but it is rapidly increasing in value, and those who invest now and improve what they buy will be sure to grow wealthy in a few years' from its increased value. The foothills, as well as the valley, will, ere another decade, be dotted over with happy homes in the midst of vineyards and orchards, with neat, comfortable cottages, and pleasant drives in avenues lined with the fruit and flowers of the semi-tropic and temperate zones.—*Ione Valley Review*.

## SIERRA COUNTY MINES.

The Forest City Tribune says that the Sierra Buttes Company, at Sierra City, gives steady employment to 300 men. About 180 men are employed in the Bald Mountain mine at Forest City. At the Bald Mountain Extension, and other mines in the neighborhood, large forces of men are employed. The Alaska mine at Pike City has 70 men, and the Marguerite mine at Logansville gives employment to the same number; the Rainbow mine on Chipp's Flat has given employment to 50 to 70 men during the past year.

## FRENCH MILK.

A correspondent of the New York Herald, writing from France, says:

To give an idea of the dairy industry in France, M. Hervé Maugon recently stated at an agricultural gathering that the milk produced in the country would, if collected, form a stream about one meter in width and 33 centimeters in depth (say three feet and four inches and one foot, one inch), flowing night and day all the year, with a mean velocity of one meter per second. Young animals drink a part of this enormous volume of milk, man takes a good part of it, and the rest is transformed into cheese and butter. No branch of agricultural industry has so far progressed during the last 50 years as the making of butter. In 1883, France bought abroad 1,200,000 kilograms of butter, and sold to foreigners only 1,100,000 kilograms. She now exports 34,000,000 to 35,000,000 kilograms of butter annually, and receives in return from abroad (especially from England), a sum of more than 100,000,000 francs.

## J. D. SPRECKELS &amp; BROS.,

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS.

325 Market Street.

SAN FRANCISCO.

CALIFORNIA SUGAR REFINERY,

Manufacturers of the

STANDARD SYRUP,

A SUPERIOR ARTICLE,

Put up in Barrels Expressly for Home Consumption.

ALSO,

EXTRA HEAVY SYRUP,

In Barrels for Export.

REFINED SUGARS,

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.

## STOCKTON

*Business College*

F. R. CLARKE, Principal.

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the year. Tuition is less than our half usual rates. Excellent board \$10 per month.

## COURSES OF STUDY:

Full Business Course, Full Normal Course, Teacher's Course, Review Course, Academic Course, Special Course, Languages, Telegraphy.

The COLLEGE JOURNAL, containing full particulars sent postpaid. Address: F. R. CLARKE, P. O. Box 15, Stockton, Cal.

HOME MUTUAL INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY.....1883.

FIRE ONLY.

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 84

Assets, Jan. 1, 1883, - - - \$717,156 63

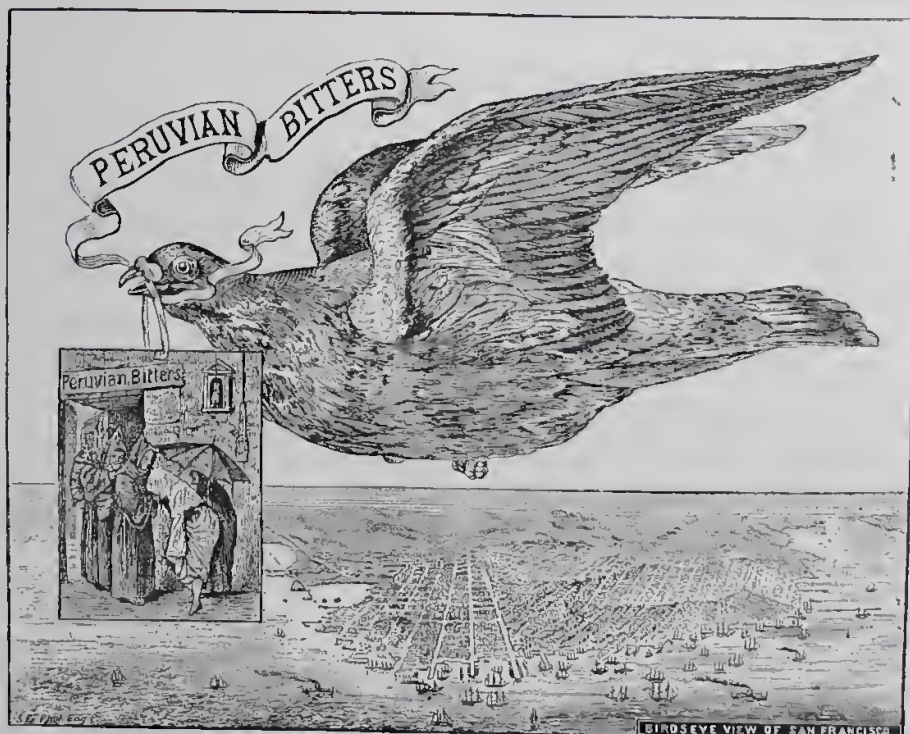
Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

## OFFICERS:

J. F. HOUGHTON.....President  
J. L. N. SHEPARD.....Vice President  
CHAS. R. STORY.....Secretary  
R. H. MAGILL.....General Agent.



## PERUVIAN BITTERS.

AS A BEVERAGE, - - - NECTAR! | AS AN APPETIZER, - - - UNEQUALED!  
AS A REMEDY, - - - SOVEREIGN! | AS A WHOLE, - - - UNPARALLELED

AN UNFAILING CURE FOR ALL MALARIAL DISEASES, DYSPEPSIA AND DEBILITY.



## FARMERS BUY THE BEST AGRICULTURAL MACHINERY.

SCHUTTLE  
**Farm Wagon,**  
Warranted to last longer with less repair than any wagon made.

**Adriance Buckeye Mowers,**  
For 22 years the leading Mower in the World.

**Taylor Wheel Horse Rake,**  
The best Hay Rake on wheels.

**Dedericks Perpetual Hay Press,**  
Has superseded all other Hay Presses. Puts 10 to 12 tons of hay in a car.

**Rice's Straw Burner Engines,**  
Only successful Straw Burner made.

**GOLD MEDAL THRESHER,**  
Does more and better work than any Thresher manufactured.

**Hodges and Case Headers,**  
Superior in make and lighter in draft than any other Header.

**PERKINS' WIND MILLS,**  
Warranted to run lighter, more substantial, better principle of construction, less liable to get out of order than any other.

**HOWE STANDARD SCALES,**  
Superceding all other make of scales. Adopted by U. S. Government and all the leading Railroads of the Country.

**Glidden Barbed Wire,**  
The standard Barbed Wire of the Country, ten times as much sold as any other Wire made.

**Enterprise Coffee Mills,**  
The most perfect constructed Mill in use.

Nails, Rope, Plows, Cultivators and Staple Hardware and Agricultural Implements FOR SALE AT SAN FRANCISCO PRICES AT

**HAWLEY BROS.' HARDWARE CO.**  
AGENCY,  
Cor. Los Angeles and Requesa Sts.,  
LOS ANGELES, CAL.

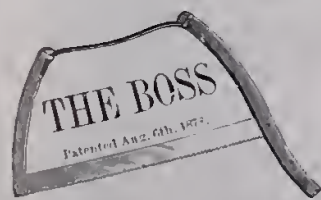
C. P. SHEFFIELD. J. PATTERSON. N. W. SPAULDING.

**PACIFIC SAW  
Manufacturing Company,**

17 & 19 FRENCH STREET,

SAN FRANCISCO.

**A NEW WOOD SAW!**



THE LATEST, THE BEST.

The above illustration shows an AUTOMATIC SELF-TRAINING WOOD SAW FRAME. The saw is straitened by means of a steel spring secured to the wood end pieces with Metal Bands. With this device a saw is perfectly and automatically straitened at all times. No cross bars or braces are required to give stiffness to the frame. The space in wood saw frames usually filled up with such devices is left open, giving the saw greater capacity for sawing large slabs of wood, wide planks or boards. There is no screw straining rod to get out of order.

Price, complete with Pacific Saw Mfg Co's Extra Blade, set and filed, ready to work, each, \$1.50, with first second quality blade, set and filed, ready to work, \$1.25; with imported blade, set and filed, ready to work, \$1.00.

**A LIBERAL DISCOUNT TO THE TRADE.**

**AGENTS FOR C. B. PAUL'S  
CELEBRATED FILES,**

Planing Knives, Currier Knives, Saw  
Mandrels, and Saws of Every  
Description Made to Order.

**EDGE HILL  
VINEYARD, WINE CELLAR AND  
DISTILLERY,**  
Near St. Helena, Napa County, California.

SCHUEFFLER'S CELEBRATED VACUUM DISTILLED

**SANITARY BRANDY**

—AND—

**Brands of Red and  
White Wines.**

STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED

**Burgundy, Bordeaux and  
Rhine Wines.**

**Orders Received and  
Promptly Attended to by**

WM. SCHEFFLER,

PROPRIETOR.

**COMMERCIAL  
INSURANCE COMPANY**

OF CALIFORNIA.

**Fire and Marine Insurance**

**Capital, paid in full, - \$200,000.00**

**Assets, Dec. 31, 1881, \$377,457.82**

**Losses Paid Since Company was Or-  
ganized nearly, \$800,000.**

JOHN H. WISE..... President  
CHAS. A. LATON..... Secretary

**OFFICE.**

No. 405 California Street, S. F.

**THE CALIFORNIA  
POWDER WORKS.**

**Santa Cruz Gunpowder.**

**HERCULES AND MINING POWDER.**

**SUPERIOR SPORTING POWDER.**

**Pacific Rifle and Pistol Powder.**

**ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
Reqs.  
SHOT,  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.**

PRINCIPAL OFFICE,

**No. 230 California Street,  
SAN FRANCISCO, CAL.**

**GOLD DEPOSIT ON THE Klamath  
RIVER BED.**

It will probably not be disputed that the Klamath river bed is the largest and yet the most concentrated depository of an exclusively gold-bearing country that there is on the Pacific Coast. There is no other river draining so large a territory that is all gold-bearing, as the Klamath and its tributaries. This is a fact that will be apparent to all upon a casual glance at the various placer districts of the coast and their drainages. Every other river of equal magnitude, while they may drain and carry the wash of considerable gold-bearing districts, also carry the debris of large sections utterly barren of auriferous deposits, thus filling their beds with much material that has no treasure in it. In this respect the Klamath river is a remarkable exception, and with no intention to deal in the sensational, it would not require a large amount of credulity to become convinced of the fact that there is fabulous golden treasures deposited in its channel, the accumulations of thousands of years' grinding from nature's mills. For 150 miles from the ocean every creek or tributary that puts into the Klamath river has its history of successful mining in the early days. Commencing below Yreka, and following down the river are Cottonwood creek, Scott river, Indian creek, Elk creek, Clear creek, Independence creek, Dillon's creek, Rocky creek, Salmon river, Camp creek, Boyce creek, Red Cap creek, State creek, Bluff creek, and Triunty river, flowing consecutively, one after the other into the Klamath river, bringing with them their gold-bearing debris, with no stream in the whole distance to mingle barren matter with the golden deposit. Can we come to any other conclusion than that there is fabulous, unmeasured treasure in the bed of the Klamath river? The current of the river is a power which, if harnessed, can scarcely be calculated. It appears to the Standard that no enterprise of mining for treasure could be undertaken with such definite, tangible object as the gathering of the gold which ages upon ages have deposited in the river channel of the Klamath. Where the bottom has been reached by wing-damming in limited places, thousands of dollars have been taken from a single square yard. Is it not possible to raise this golden gravel from the running current in a wholesale manner?—*Humboldt Standard.*

### OUR FRUIT CANNERY.

The lot is being graded and lumber hauled to the ground for the fruit cannery, and seven carpenters have already commenced work erecting the building. The company has bought a steam boiler with attachments complete, and all the necessary machinery for the business. Sufficient tin has been purchased to make about 300,000 cans as a starter.

It is intended this season to can all kinds of fruits and vegetables, and next year the canning of salmon will be added to the business.

The company expect to give employment, during the busiest portion of the season, to from 100 to 150 hands, at reasonable wages. This is nice work for women and girls, in fact the managers of other canneries say that for most of the work required, they would rather have females than males, and the latter prefer it to other kinds of work.

The benefits of this new enterprise to our community can hardly be over estimated. It will help both town and county. It will furnish a fair market price for the surplus fruits and vegetables we can raise. We have a large area of us fine fruit and vegetable land as can be found anywhere, and it can all now be made more profitable by raising fruits, sweet corn and vegetables, than raising potatoes and grain as heretofore.—*Petaluma Courier.*

### FINE ORCHARD.

Daniel Craven, who lives about a mile and a half southeast of Mooretown, has an orchard that includes 1,500 apple trees. All the best known and favorite varieties are grown. Last year he raised about 18,000 pounds of apples, but owing to the want of market he felt an immense quantity of these to his bags. He has pears, cherries and other fruit trees, besides 1,800 walnut trees. Raspberries, strawberries and blackberries do finely on Mr. Craven's place. Last year he had about 2,000 pounds of the last-named fruit.—*Battle County Register.*

Subscribe for THE RESOURCES OF CALIFORNIA.

### CLEAR LAKE.

The following is an extract from Major B. C. Trosman's description of this beautiful sheet of water:

It is in Lake county, which was organized in 1861 from a portion of Napa county. It is an irregular sheet of water, between 25 and 30 miles in length, and is in some places from ten to twelve miles in width. Its general depth is about 40 feet—although it is more than double that depth at what is called the Narrows—and is about 1,300 feet above the sea, or about the same elevation as Lake Geneva in Switzerland. It is almost surrounded by mountains and high hills, with here and there a lovely indentation; and the lower part of the lake is picturesque dotted with islands, all of which are beautifully wooded. The largest is called Elmheden (Lolian for Paradise). Another very pretty island is called Ho-y-m-den; it is only a short distance from Sulphur bank (or East lake), and would make a summer resort fit for a king. It is owned by T. P. Madden and Captain R. S. Floyd, of San Francisco. Mr. Joseph Eastland, of San Francisco, also owns an island near by. The waters of Clear lake fall from six to ten feet during the dry season, and empty into Cache creek, whose waters flow into the Sacramento river.

There are a number of pretty towns lying upon and adjacent to Clear lake, among which is Lakeport, the county seat of Lake county. It contains about 1,000 inhabitants. It is situated upon a series of terraced elevations, and is abundantly shaded by the foliage of clusters of immense oaks. The landscape scenery is very beautiful. At the head of the lake is a little town called Upper Lake, with 400 inhabitants, an hotel and livery stable. The valleys in this vicinity are very beautiful and productive. Lower Lake is also a pretty place, and contains nearly 500 inhabitants; it is situated some three miles away from the lower part of the lake. Sulphur bank, or East lake, is situated on the lake, and is ten miles from Lower Lake. There are large quicksilver works at this place, giving employment to nearly 300 men.

### THE GARDEN SPOT—RIVERSIDE.

Judge Whaley, of the San Luis Rey Star, visited Riverside last week, and, in his next issue, he talks enthusiastically, using the following language:

Probably the most beautiful, most enchanting spot in Southern California, in fact, in our whole State, we visited a few days ago, while on a trip to San Bernardino—that place is Riverside. Here, only a few years ago, was a barren waste of desert country, which can now be well called the garden spot of the world. Here have the people who dwell therein, spent money and worked with enterprise toward rearing a monument to their labor. The principal industry of the settlement is centered in the production of citrus fruits, and at this season of the year, while the oranges in untold quantities are ripening upon the trees, a ride among the groves is a sight well worth seeing. The water supply of Riverside is obtained from the Santa Ana river, which runs by the settlement. So perfect has the system of irrigation been made, by ditches, and with the abundant supply they have, the prosperity of Riverside is easily accounted for. The ornamentation of the settlement is most beautiful, and no lack of expense seems to have been spared in accomplishing this end, the most prominent feature being her beautiful and nicely-trimmed cypress hedges. Her private residences, many of them, are magnificent, and, on the whole, wear a decided air of comfort. The people of this village should be happy in their homes, in the land of fruit and the vine.—*Riverside Press.*

### OLIVE CULTURE

Considerable attention is now being given to the probabilities of successful olive culture in this State. It is said that in the year 1881 there were imported into this country from Italy nearly one-quarter of a million of gallons of olive oil, and of this quantity one-fourth, at least, was cottonseed oil which had been sent to Italy from the United States. Now if, as there is good reason to believe, the olive will flourish on our foot-hills, and indeed, almost anywhere, there seems to be no good reason why its cultivation should not be profitable. The olive is a tree of slow growth, beginning to bear in about its eighth year, but it endures for centuries. In the country bordering the Mediterranean there are families which have been supported for generations by the pickled fruit and the oil of a few olive trees. Even if it be not grown for profit, the olive is both agreeable and a healthy article of food, and every farmer in the county should plant a few of these trees.—*San Jose Herald.*



you really are not. No one can tell or make uncertain  
pay, by engaging at once. Gladly on all and loans from  
Money made last, easily and humbly. Address,  
Tuck & Co., Augusta, Maine.



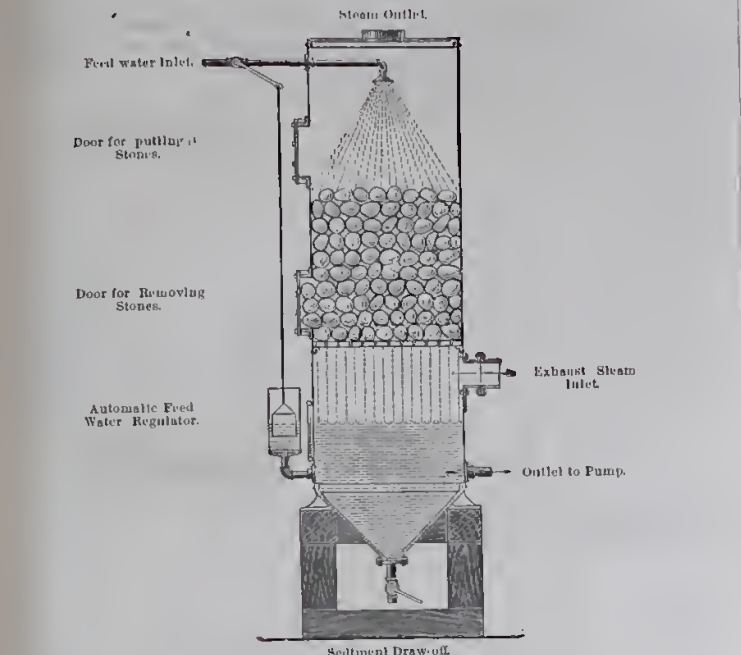
# LLEWELLYN FILTER-HEATER,

Patent Issued Aug. 12, 1873, Re-issued Aug. 10, 1881.

For the Prevention and Removal of

## STEAM BOILER INCrustATIONS

WITHOUT THE AID OF CHEMICALS.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.

Further particulars with full descriptive circular and price list can be obtained at the office of the

LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY.

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufactory, Columbia Foundry, 131 and 133 Sente Street.

## The California Lloyds

### UNION

### INSURANCE COMPANY

OF CALIFORNIA.

THE CALIFORNIA LLOYDS

(Established in 1861).

### FIRE AND MARINE

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 426 and 418 California St.

Agencies in all the Principal Cities of the United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary. C. P. FAIRFIELD, General Agent. GEORGE T. BORN, Surveyor.

M. T. BREWER, President. M. T. BREWER, Vice-President.

M. T. BREWER & CO.,

Nos. 30 and 32 J Street,

SACRAMENTO, - - CALIFORNIA

COMMISSION MERCHANTS & WHOLESALE DEALERS IN Foreign and Domestic Groceries and Dried Fruits, Produce, Honey, Nuts, Garden and Flower Seeds. Please give us a trial. 30 and 32 J Street, Sacramento, Cal.

**WIS** people are always on the lookout for a chance to increase their earnings, and in time become wealthy; those who do not improve their opportunities remain in poverty. We offer a chance to make money. We want men, women, boys and girls to work for us right in their own localities. Any one can do the work properly from the first start. The business will pay more than ten times ordinary wages. Expensive outfits furnished free. No one who engages fails to make money quickly. You can devote your whole time to the work, or only spare moments. Full information and all that is needed sent free. Address, **Brewer & Co., Portland, Maine**

### FRUIT LANDS.

The following article, which we take from the Los Angeles Express, shows what fruit lands are selling for in different parts of that county, and also the revenues derived from them, when covered with orchards and vines:

The question is often asked: "What are fruit and grape lands in Southern California worth?" The answer, of course, will differ widely, according to the locality selected, the nature of the water right as to both title and supply, the proximity to the city, or railroad facilities, the nature of the soil, and the class of people one will have for neighbors. The last item would include church and school accommodations. The best way to answer the question will be to give the sales at real estate in various parts of the county, and of recent date.

The first place selected is the Inland. This is well known as one of our most attractive settlements. The soil is superior. The climate is the best of any. The community is industrious, quiet, and intelligent. The transactions given below are from the records in the County Clerk's office, and were all made during the present season. Most of the property has changed hands within two months. Mr. Burr sold to Lieutenant Wise twenty acres of unimproved land, with water, for \$1,500. Mr. Moses Mitchell bought ten acres of raw land for \$1,000. Lieutenant Wise sold twenty acres of raw land at \$1,000. On this piece a house costing \$1,000 will be built. Mr. Marshall purchased from Mr. Weill sixteen acres of rough brush land for \$500. The chaparral will be cleared off this lot, and there is no doubt it will prove fine fruit and grape land. Mr. Bronson sold ten acres, six of them improved, for \$3,000. Doctor Beardslee sold 28 acres for \$5,000. Mr. T. Chapman sold ten acres, with 100 trees on it, for \$2,500. In these sales, and, indeed, in most transfers made in the country surrounding Los Angeles, it is seldom the buildings can be sold to cut much of a figure in the value of the place.

Presidents to more under cultivation, and has better church and school privileges than many places in this county. Lands under improvement here command \$1,000 per acre. Usually the houses and outbuildings are of considerable value. Lately Mr. Santa purchased two acres, for which he paid \$3,000, and three acres adjoining, for \$2,000, making an average of \$1,000 per acre. A hotel to cost \$75,000 is contemplated for this site. The location, doubtless, had much to do with the price.

A day or two since Mr. Conklin, a new-comer, purchased the old High place, corner of Main and Adams streets. It contained about thirteen acres, and brought \$12,000. The place is well improved.

The land at Pomona, one of our newest colonies, is selling rapidly at \$50 to \$200 per acre, as to nearness to the center and convenience of water. This is, of course, raw land. Lands at Santa Ana and Daviney have also been sold at moderate rates. Mr. Haylock recently sold a place near the former place at \$1,500 for twenty acres, improved land. As an opposite extreme, may be mentioned the sale of the "Tallant" place, at San Gabriel, of 40 acres, at \$26,000. This place has an abundant water supply, with a good title. There is a good house on it, with outbuildings complete. The ranch is mostly set to orange trees, the greater part of which are bearing, and the rest will come in bearing in a year or two.

Another question, always sure to follow the answering of the former one, is "What is there to justify such high prices?" This is, of course, the question of one not acquainted with this county and its capacities. Doubtless the mild, equable climate has much to do with this matter. Those who have lived here for a few years, and who know the comfort attendant upon life spent under our sunny skies, where rainy days hardly number a dozen in the year, where frosts are almost unheard of, and where broiling, sultry heat is as rare, do not care to part with property from which they derive an ample revenue. But that is not all. The actual income from haprover farms in Los Angeles is large enough to justify every cent paid for the dearest bit of soil in the list above. A good vineyard will not, for wine, raisins, or dried grapes, from \$100 per acre yearly to twice that sum. That is a moderate statement, and can be proved. Many vineyards will pay more. A good orange grove, well set and cared for, at maturity of growth will yield from \$200 to \$300 per acre per annum. Choice peaches, apricots, prunes, and many other delicious fruits pay as well as grapes. There are many other enterprises of which lack of space forbids mention at this time, which will pay any energetic man who uses sound judgment in his business.

The writer may say that he was last autumn in the real estate business. He had two clients, one of whom wished to buy an old vineyard, the other a fruit ranch. In the course of inquiry, an orchardist was found just outside this city who has twenty acres, with a small house on it. The place is all set to deciduous trees, which are now in full bearing. The owner does his own work, and peddles the fruit in this city. A firm offer of \$30,000 was declined. A visitor was also found, the happy possessor of 30 acres in old Mission vines. There is on the place a plot for making wine, and other valuable improvements. This place was offered for \$30,000, or said the owner, I will take \$25,000, if you will give me the crop now on the vines. Here is the proof of the value of these orchards and vineyards. Both men backed their words that a revenue of a large interest on \$1,000 per acre was now coming off the land.

### POTATO YIELD.

Mr. W. H. George informs the Inva Independent that a gentleman at Bishop cultivated 2,373 pounds of potatoes from 12 pounds of seed on a piece of ground two by five rods in extent. This is at the rate of nineteen tons per acre. The variety is called the "white star," and has but recently been introduced in this valley.

### WILL WHEAT CONTINUE A PAYING CROP?

The following article, by Orange Judd, in the American Agriculturist, will interest the farmers of this State as well as those abroad.

There is a cheerful side to this question. Comparing a present railway map of this country with one five years ago, we see a large increase. In the black lines, extending continuously from the Atlantic to the Mississippi and Missouri rivers and beyond. Comparisons and billings in like are added to these trunk lines every year, and every fresh line added is of special interest to all Western farmers. Competition, great improvements in locomotives, freight cars, steel rails, etc., are rapidly reducing the cost of transportation on, and what, flour, corn, and other grains, salted and dried meats, butter, cheese, etc., are carried almost as cheaply from the Mississippi to the Atlantic ports now as they were from western New York, Ohio, and Michigan only a few years ago. These cheaper railway rates are already raising the question whether it will be worth while to enlarge, or even maintain, the great canal routes. New York has abolished tolls on the main water arteries, and it is even feared that, with canal tolls free, the railways can still compete with any water transportation.

Can Europe absorb our surplus paying rates? There is no more well-established fact than that consumption is largely increased by every small decline in price. At present, in London, white wheat is worth \$1.30 to \$1.40 per bushel, say \$1.35—at this price there is a great and enlarged demand for consumption. The regular railway freight from Chicago to New York is now about eighteen cents per bushel. Sea freight, New York to London, 32 cents per bushel. Add three cents for handling, insurance, etc., and \$1.35 in London corresponds to about \$1.40 per bushel in Chicago, and about 45 cents in Central Kansas, points on the Missouri river, and at a considerable distance north of St. Paul. Both railroad and ocean freights are much lower, which has the effect of increasing the price of grain here, or of reducing the price of grain abroad, and thus increasing the consumption, or partly both of these effects.

The point of the above is, that when wheat can be obtained in Chicago at 80 to 85 cents per bushel, it can be sold down in Europe at prices that will immensely increase consumption, and defy competition from southern Russia, Europe, India, Australia, etc., in the principal wheat regions of the West, the intrinsic cost of growing wheat and delivering it to near railway stations, is 40 to 45 cents per bushel. At points not too distant to allow it to be freighted to Chicago for 14 to 25 cents per bushel, it will continue a paying crop at least until the annual production shall have doubled or quadrupled, and even then we believe Europe will be a ready customer for all we have to spare, without reducing prices here below remunerative prices.

### ITS IMPORTANCE.

The Santa Ana Herald touches upon the cannery project and urges the importance of such an enterprise in that thrifty and rapidly-growing town, as follows:

That such an industry would pay, almost from its inception, there can be no reasonable doubt, if in the hands of those who understand the business, who would take a pride in the excellence of the products turned out, and were energetic business men, managing the enterprise upon business principles. There is a wide range of products that could be profitably canned in this valley, but the chief product would, of course, consist of fruit, of which, it is calculated by those who have given the matter attention, the valley can furnish this year, at least, 200 tons for canning and the manufacture of jams, jellies, etc. Our apples, peaches, pears, apricots, figs, and grapes cannot be excellent anywhere for size and quality, and there will be no lack in quantity. There is no better opening in the State than this cannery enterprise, which, sooner or later, will be established in the Santa Ana valley. Fortunately, indeed, will be those who shall have the foresight to perceive this inviting opportunity, and take immediate advantage of it.

The San Jose factories are notable instances of the profit to be made by such enterprises. There are two canning factories in that town, and they employ from 350 to 400 hands, one of them putting up, last year, 1,000,000 cans of fruit, 150 tons of jellies, besides jams, dried fruit, vegetables, etc., and no difficulty is experienced in disposing of the products. Indeed, these factories fail to supply the demands made upon them. As to the expense of a cannery: It has been estimated that a cannery, putting up half a million cans per annum, will require tools and machinery costing \$1,167, including a steam boiler twenty inches by twelve feet, with a steam drum two by five feet, and pump, \$650. The cannery building can be made to cost much or little, but \$1,400 to \$1,500 will do to start with. In our estimate we have allowed \$400 for the necessary tools for a tin shop. It will, of course, be necessary to have a cash capital to operate upon for the purchase of supplies, fruit, and the payment of wages, etc. It will be a money-making enterprise here, as it has been elsewhere.

In this connection, the editor of the Anaheim Gazette says: "The Los Angeles establishment, it has been repeatedly said, was a losing investment, and yet its owners were willing to build a branch cannery here or at Santa Ana, if they could have secured suitably enough." The Gazette man offers, free of all expense, a suitable and convenient site for cannery buildings to be erected in Anaheim. Have we any parties in Santa Ana that will offer similar inducements for the establishment of a cannery here? Don't all speak at once.

### RAILBOARDING.

It is stated that there will soon be some 6,000 or 7,000 men at work on the railroad extension above Heddington, and it is the intention of the company to reach the Oregon line by the time the Villard road gets there.

F. P. BACON, Pres. C. L. FOUTS, Sec.

## Globe Iron Works Co.

FOUNDRY,  
MACHINE SHOP,  
and FORGE.

Manufacturers and Repairers of all Kinds of

MACHINERY AND IRON CASTINGS,  
Hoisting and  
Mining Machinery,  
LOCOMOTIVES.  
Portable, Stationary and  
Marine Engines.

BISHOP'S ECONOMICAL MINING  
PUMP APPARATUS,

Which does away with Cumbersome Pump  
Rods, Valves and Balance Belts, operating  
equally well in shafts or inclines, admitting  
of deflection into distant workings. Circu-  
lars furnished free, upon application.

AND  
MINING HORSE-POWER AND  
QUICKSILVER FEEDERS.

SPECIALTIES.

PATENT AIR COMPRESSORS.

222 and 224 Fremont St.,

Between Howard and Folsom

San Francisco



## THE PROFITS OF GRAPE CULTURE.

Much has been said about the profits of grape growing, and some are inclined to doubt that they are sufficient to justify the very high values that lands have attained here. The best argument we can present to such is the following list of crop values from lands in the vicinity of Pine Station last year, as furnished by our wide-awake and intelligent correspondent at that place:

Charles Wheeler—30 acres, 285 tons, worth \$9,125, or over \$300 an acre. He picked from several Zinfandel vines two vineyard boxes (or about 90 pounds each) leaving a heavy second crop on the vine. He often filled three boxes from two vines of Zinfandel varieties. The yield, taken to the cellar, was eighteen tons to the acre, and Mr. Wheeler says that at least three tons per acre was left on account of frost, making a total yield of 21 tons per acre. This vineyard has been heretofore spoken of, and has been visited by several.

R. M. Wheeler—Twelve acres of two-year-old vines, 47 tons, worth \$1,645.

H. M. Pond—Five acres of two-year-old vines, fifteen tons, worth \$480. There are ten acres in the tract, but about half of it was set last year.

J. J. Newkirk—Thirty acres two-year-old, 105 tons, worth \$3,000. All that the land cost two years ago.

F. W. Loeber—Twenty-eight tons from 2,700 vines, some of them young. Over ten tons per acre. Worth \$868.

W. A. Field picked from three-year-old vines 40 pounds to the vine, or three vineyard boxes full from three vines, the same being the vines noted some time since; also, at about the rate of twelve tons per acre for old vines.

N. Sawyer—From eight acres of two, three and five-year-old vines, 45 tons, worth \$1,600. Martin Firschenfeld harvested 134 tons, worth \$4,155, from 24 to 26 acres.

J. G. Norton harvested over 100 tons, worth near \$4,000.

J. W. Williams harvested from fifteen acres 100 tons, valued at \$3,200. About a quarter of these are young vines, two and three years old.

Captain Wm. Peterson harvested from 35 acres 210 tons, worth \$6,000. The Captain says he might have picked about fifteen tons more, but thinks he got enough. We think so, too.—*St. Helena Star*.

## THE SILK INDUSTRY.

The California Silk Association asks the Legislature to aid it, by an appropriation of \$10,000, to assist in the founding of a silk-reeling establishment. The association is not a business corporation; its membership embraces some of the most unselfish and philanthropic of our people. Its sole aim is to encourage silk-growing in California, add to the wealth of the State, and give profitable employment to thousands of women and girls. California raw silk commands 25 per cent. better prices than any other. Without flatures and a silk-reeling school, the silk industry here cannot be a success. In 32 counties of the State the silk-growing experiments have been entirely successful. Our climate is deemed the best in the world for this industry. The world's production of raw silk is \$400,000,000. China and Japan produce \$150,000,000. Piedmont and Lombardy export a surplus of \$30,000,000, after supplying home manufactures. The United States import annually \$30,000,000 of raw silk, and its manufactures of silk amount to \$80,000,000, and gives employment to 32,000 persons. In France, silk-culture is a part of the national education for girls. California, in silk-growing, can give employment to 20,000 women and girls easily; the work is light, and the capital demanded nominal. The superiority of silks depends largely upon the skill of the operatives, and they must, therefore, be educated to it. One lady near Angels' Camp, now makes a handsome income from one or two acres of mulberries, by shipping cocoons to Europe, at four dollars an ounce. The friends of the association claim that \$30,000,000 can be speedily added to the wealth of the State, by encouragement of the industry, to say nothing of giving cleanly, light, and profitable employment to women and children. It would appear to be an eminently wise act to give the money asked for, in order to disseminate proper information, establish the school, and put on its feet this infant industry which is so full of promise.—*Record-Union*.

## FORTUNATE FAIRMAKERS.

The census of 1880 tells us that there are in the United States 4,098,907 farms, of which number only 139,231 comprise less than ten acres. This shows what an amazing country this is—a country of large farms, the owners of which not only make more than a good living off them, but, with the rapid increase of population, become rich by the rise in value of their lands.—*Nevada Transcript*.

## COST OF BUILDING MATERIALS.

People who intend to come to Southern California to reside, are interested in knowing the cost of building material here, because, in casting up future plans, it is as essential to know how much one's house and barn will cost as it is to know what the land will cost. The following price list is the one adopted by the lumber dealers in this county, and will aid the inquirer in approximating the cost of building:

Tough merchantable Oregon pine.....	\$30 00
Long redwood.....	30 25
Oregon pine flooring, first quality.....	49 00
Oregon pine flooring, second quality.....	35 00
Redwood, tongued and grooved.....	42 50
Surfaced.....	42 50
Kumuk.....	42 50
Sliding, first quality.....	35 00
Sliding, second quality.....	30 00
Double surfaced.....	15 00
Double surfaced, tongued and grooved and beaded single surfaced, tongued and grooved and beaded.....	45 00
Lath, per M, 1 inch.....	6 00
Lath, per M, 8 feet.....	8 00
Lath, per M, 8 feet.....	12 00
Shingles per M, four bundles to the M.....	4 50
Shingles, split, each.....	10 00
Surface dressing.....	42 50
Double surface stepping.....	30 00
Rough pointed pickets.....	40 00
Surfaced pickets.....	40 00
Double clear Oregon pine or redwood.....	35 00
Fencing, 1x4.....	30 00
Fencing, 1x4, and 1x4 1/2 inches wide and upward.....	42 50
Battens, 3/4 inch, rough.....	30 00
Surfaced.....	40 00
Double surfaced.....	42 50
Four posts, sawed, 7 feet and under, per 1,000 feet.....	30 00
Refuse lumber.....	15 00
Shingles, per M.....	15 00
Shingles, Shakes.....	17 25
Santa Cruz lime, per barrel.....	2 50
Cotton lute.....	2 50
Plaster, per barrel.....	3 00
Portland cement.....	9 50
Hoffmann's Kieselcement.....	5 00

Bricks cost about eight dollars per thousand, and it is estimated that, when laid in wall, the cost is \$14 per thousand. Plastering, including lathing and all material, costs from 20 to 25 cents per square yard. Painting (two coats) costs about 20 cents per square yard. The cost of a house of four rooms, each about twelve by fourteen feet, is from \$800 to \$1,200, according to finish. And it may be remarked that the thick-walled, expensive houses to which Eastern people are accustomed, are not only unnecessary, but undesirable in this climate.—*Press and Horticulturalist*.

## A FRUIT REGION.

The *Eureka Standard* is of the opinion that full one-half the width of Humboldt county, lying next to the eastern line, is unsurpassed for the quality and perfection of fruit which it yields; and particularly is this true case with the territory which lies on the water-shed of the Trinity and Klamath rivers; and adds that, for perfection in growth and quality of flavor, this latter section is unequalled anywhere, it makes no difference whether you go to the southern end of the State, or refer to the stored orchards of the Orient. There is that combination of climate and soil on the Klamath and adjoining county which has made it the home of the apple, the pear, the cherry, and other fruits that require like conditions. There are great tracts of Government land upon which the plats have been recently filed, which can be had of Uncle Sam merely for the taking, at \$1.25 per acre. On the Klamath the objection cannot be raised that it is entirely beyond reach of market. It is, at present, for fresh fruits, but we have the whole world for a market for dried fruits, and the Klamath affords a natural, and cheap, and easy avenue through which to reach it. The cost of placing such freight on the steamer wharf at Crescent City would be comparatively small, and the current of the river is available at all times for flat boats and canoes. Those who take time by the forelock, and plant orchards on the Klamath and Trinity, will have an independent income, measurably free from insects that infest the warmer countries. Here we have sufficient snow and cold weather to destroy very generally the larva that a more southern temperature nurtures into life.

## SMALL OR FRUIT FARMING.

This kind of farming in the foot-hills of California promises, at no distant day, to add much to the wealth and resources of the State. The Dutch Flat Times, in this connection, says: "When water for irrigating purposes is obtainable, the foot-hill lands are better adapted to the orchard, vineyard, and berry than the valley lands. This has been practically demonstrated. At this altitude in this section is grown the finest apples in the State. Mountain fruit always commands a higher price in the market than the valley production. The grape does not do so well this high, but from Colfax down it thrives with luxuriance. Many acres of new land at and near Colfax are being set to grapes this spring. In fact, there seems to be an awakening to the interest of fruit-raising in the upper foot-hills never before experienced.



BROAD GAUGE

## Summer Arrangement.

Commencing Wednesday, April 18, 1883.

And until further notice, Passenger Trains will leave from, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
8:30 A. M.	San Mateo, Redwood, and Menlo Park.....	6:40 A. M. 8:10 A. M. 10:40 A. M. 3:50 P. M. 4:25 P. M. 5:15 P. M. 6:50 P. M. 11:45 P. M.
8:30 A. M.	Santa Clara, San Jose and Principal Way Stations..	6:40 A. M. 8:10 A. M. 10:40 A. M. 3:50 P. M. 4:25 P. M. 5:15 P. M. 6:50 P. M. 11:45 P. M.
10:40 A. M.	Gilroy, Pajaro, Castroville, Salinas and Monterey..	10:02 A. M. 6:00 P. M.
10:40 A. M.	Hollister and Tres Pinos..	10:02 A. M. 6:00 P. M.
10:40 A. M.	Watsonville, Camp Goodall, Aptos, New Brighton, Soquel (Camp Capitola) and Santa Cruz.....	10:02 A. M. 6:00 P. M.
10:40 A. M.	Soledad and Way Stations..	6:00 P. M.
7:40 A. M.	Monterey and Santa Cruz. (Sunday Excursion)....	8:45 P. M.

Sundays excepted. Sundays only. Theatre train, Saturdays only.

Stage connections are made with the 10:40 A. M. Train, except PASADENA Stage via San Mateo, and PACIFIC COAST STAGES via Santa Clara, which connect with 8:30 A. M. Train.

**SPECIAL ROUND-TRIP TICKETS**—At Reduced Rates to Pescadero, Monterey, Aptos, Soquel and Santa Cruz; also, to Gilroy, Pajaro and Paso Robles Springs.

**EXCURSION TICKETS**—Sold Saturdays and on Sunday mornings—good to return on Monday to Santa Clara or San Jose, \$2.00; to Gilroy, \$4.00; to Monterey or Santa Cruz, \$5.00; also to principal points between San Francisco and San Jose.

**RUNDAY EXCURSION TICKETS**—To either Monterey or Santa Cruz, and return, \$2.00.

**TICKET OFFICES**—Passenger Depot, Townsend street, and No. 2 New Montgomery street, Palace Hotel.  
A. C. BARRETT, Superintendent. H. R. JUDAH, Asst. Pass. & Tkt. Agt.

**SOUTHERN DIVISIONS.**  
For points on Southern Divisions and the East, see D. P. R. TIME SCHEDULE.

# OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY FOR JAPAN AND CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 2 P. M.  
**YOKOHAMA & HONGKONG**

Connecting at Yokohama with Steamers for Shanghai.

Will sail from San Francisco:

COPTIC.....	Saturday, May 5th.
ARABIC.....	Thursday, June 25th.
OCEANIC.....	Tuesday, July 10th.
COPTIC.....	Saturday, July 21st.
ARABIC.....	Saturday, September 15th.
OCEANIC.....	Thursday, September 27th.
COPTIC.....	Thursday, October 11th.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cabin plans on exhibition and passage tickets for sale at C. P. H. R. Co.'s General Offices, Room 74, Corner Fourth and Townsend Streets.

**FOR FREIGHT** apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 202 Market street, Union Block.

T. H. GOODMAN,

Gen'l Passenger Agent

LELAND STANFORD,  
President

# THE NEVADA BANK —OF— SAN FRANCISCO.

Paid Up Capital - - - - - \$3,000,000  
Reserve (U. S. Bonds) - - - - - 3,500,000

Agency at New York.....52 Wall Street  
Agency at Virginia, Nevada.

**ISSUES COMMERCIAL AND TRAVELERS' Credit.**  
Buys and sells Exchange and Telegraphic Transfers.

This Bank has Special Facilities for Drafting in London.

SAN FRANCISCO.



## QUICK TIME AND CHEAP FARES

FROM

AUSTRALASIA, CHINA &amp; JAPAN,

TO

NEW YORK

AND

LIVERPOOL

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

# CENTRAL PACIFIC RAILROAD

CONNECTING WITH

Union Pacific Railway

AT OGDEN, UTAH.

AND

# SOUTHERN PACIFIC RAILROAD

CONNECTING WITH

Atchison, Topeka and Santa Fe Railroad,

AT DEMING, NEW MEXICO.

AND THE

Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

## THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway Lines in the Eastern States, for all the Cities of the

UNITED STATES AND CANADA.

CONNECTING AT

NEW YORK

With the several Steamer Lines to

England, France.

AND ALL EUROPEAN PORTS.

Silver Palace Sleeping Coaches,

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience to the Passenger while en route—consisting of the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable couches, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Patrons.

Children under twelve years of age, Half Fare. Under Five years of age, Free.

100 pounds of Baggage per full Passenger free. 50 pounds of Baggage per half Passenger free.

## PRINCIPAL TICKET OFFICE

AT THE

OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

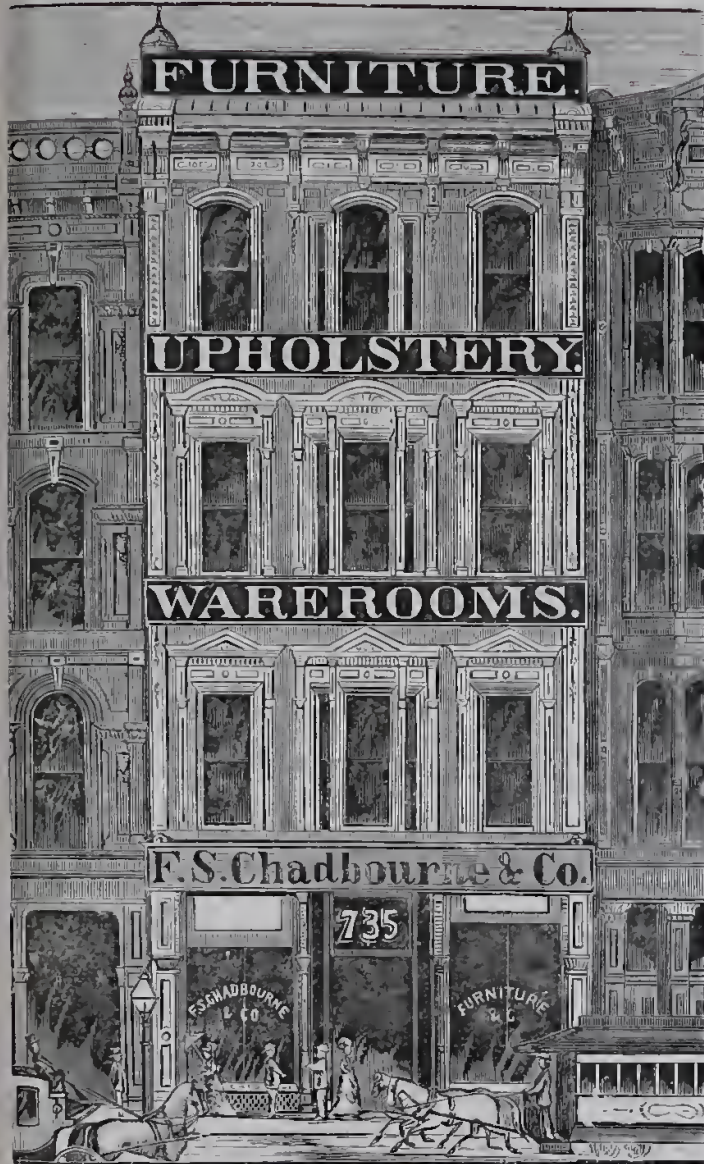
Where passengers, calling in person, can secure choice of routes and sleeping-car accommodations.

A. N. TOWNE, Gen'l Superintendent. T. H. GOODMAN, Gen'l Pass. & Ticket Agt.  
SAN FRANCISCO, CAL.



F. S. CHADBOURNE & CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



IMPORTERS, MANUFACTURERS,

AND—

Wholesale and Retail Dealers in

FURNITURE AND BEDDING

OF EVERY DESCRIPTION.

Chamber, Parlor, Library and Dining  
Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish

Easy and Lounging Chairs, Etc.—Hotels and Private

Residences Furnished.—Designs Furnished  
and Estimates Given.

F. S. CHADBOURNE & CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

#### THE GARCIA MINING DISTRICT.

The Cloverdale papers make the following mention of a new mining district in its section. The *Reveille* says:

Mr. John Ornbauer brought to town one day this week a small bag of ore from the newly-discovered Yorkville mine to have it assayed. There being no appliances in town the ore was sent to San Francisco. Charley Conk went out to the mine at the beginning of the week, and has returned. He thinks, from a rough examination of the ore, that the prospects are good for a fine grade of ore. The quality of rock is such that it could be easily worked. The ledge can be traced for three miles on the surface, and a good breadth is sustained. The nature of the country is favorable, being covered with heavy mineral deposits and "ledgy." We would like to see a good paying gold mine struck in that neighborhood.

The *Sentinel* also says: Mr. G. A. Carsten, now engaged in mining near Yorkville, was in Cloverdale this week, and from him we learn that the mining excitement around Yorkville is based on a staunch foundation. Mr. Carsten has had fifteen years' practical experience in the mines of this coast, and has made silver mining a scientific study, and his opinion is entitled to much weight. He has carefully surveyed the country around Yorkville, and arrived at the conclusion that it is destined to become the most productive mineral region in California. The ore bed commences at Yorkville and crops out continuously to the headwaters of the Garcia river. The breadth of the ore has not yet been ascertained. Mr. Carsten thinks, basing his opinion on his surveys and tests, that these mines will prove almost inexhaustible. The ore is rich in silver, gold and copper, the former greatly predominating, but as no assay of surface ore has yet been made, he can but approximate the proportions, and from specimens taken from his claim he thinks it will run sixteen ounces of silver to the ton, the gold and copper existing in limited percentage.

Many who have taken claims would not to-day sell the same for \$1,000, even though no positive developments have been made.

The bed was evidently thrown up by volcanic action, for in the chimney now being sunk by Mr. Carsten, after passing through the surface blossoms he entered a strata of ash over 30 feet thick. He computes that he will strike the bed on his claim 75 feet below the surface. He has yet about 30 feet to sink, and when this is finished he expects rich returns. For the benefit of readers not acquainted with the geography of this country, we will say that Yorkville is located in Mendocino county, 29 miles from Cloverdale.

#### A NEW ENTERPRISE IN FRESNO.

The following, from the *Fresno Examiner*, will interest many of our agricultural readers:

Mr. Kearney has just succeeded in obtaining a tract of land lying west and southwest of Fresno. It is as level as a floor, and every acre of it could be planted and irrigated without any expense of leveling. The soil is a reddish loam, containing enough sand to render cultivation easy, and to prevent baking after irrigation. This body of land Mr. Kearney expects to put in market after a few years, but before that time he intends improving it in such a manner as to make it one of the most attractive spots in the State. A company is now being organized in New York, with a capital of \$1,000,000, for the purpose of putting out, at once, a 2,000-acre vineyard in the center of the tract. The land will be irrigated from a new branch of the Fresno canal. There will be avenues 80 feet wide extending through the tract, at a distance of a half a mile apart. These will be laid out at once, and lined on either side, with a triple row of trees. The center will be devoted to a roadway 50 feet wide. The outer row of trees will be some sort of an evergreen tree; the second tree, which will ten feet from the first, will be some quick growing tree, like the poplar, while the inner rows will be nut-bearing trees of various kinds. When the evergreens and nut trees attain a sufficient size, the poplars will be cut out, and two shaly lanes, each twenty feet wide, will be found on either side of the roadway. By this time the vineyard will be in full bearing, and the winery in operation. Another thing that will help the enterprise is the fact that the Upper San Joaquin canal, now in course of construction, will be completed this summer, and will open up for settlement a large tract of country lying to the west of Mr. Kearney's lands.

#### TIMBER LAND PURCHASED

The *Redding Independent* states that it is currently reported that a company of Truckee capitalists have purchased 3,000 acres of sugar pine land on Pitt river, and also a mill site at the confluence of that stream with the Sacramento river. During the summer they will erect a large sawmill, and invest a large sum of money in a lumber enterprise. It is known to be a fact that a company of moneyed men have purchased a large belt of timber land in that region.

#### THE REDDINGTON QUICKSILVER MINE.

The *St. Helena Star* makes the following mention of this notable mine:

It is situated in the northern end of Napa county, near the boundary line of it and Lake, and has been worked for over twenty years. The main shaft is now 650 feet deep. The character of the ore is sulphate of iron, and is found in quartz veins, between sandstone as a hanging rock and serpentine on a foot wall. The ledge runs north and southeast, and underlies to the north and east. Heavy bodies of clay are found in front of the ledge, which pitches at an angle of about 15 degrees. A new body of ore has been discovered on the 210 level. The ore is good, and the indications are that there is a large body of it. The machinery over the mine is perfect. It consists of a complete set of pumping and hoisting works, worked by a reversible engine of 35-horse power, with the customary gearing and a flat wire cable, the breaking strain of which is about 35 tons. The pump is eight inches in diameter, heavy and substantial, and has four lifts. The hoisting engine has all the modern improvements, the machinery is conveniently arranged, and ample buildings erected over them. The mine is worked through various tunnels. The shaft has three compartments. The middle compartment is fitted with a cage. Only 65 men are now employed by the company. The product is averaging 60 flasks a week. The ore goes about one per cent, or less.

#### PRODUCT OF ONE ACRE.

The following, taken from the *Yolo Mail*, is a fair illustration of the wonderful productiveness of much of California's soil:

Mr. Olmston, living southwest of town about two miles, has a single acre devoted to grapes. Two years ago, while visiting his place, he showed us this acre of vines. They hardly looked like vines but simply piles of grapes, so thickly were the clusters clinging to every part of the vine. He was then expecting to turn his logs into the grape patch, as he called it, but upon a suggestion that they might be more valuable for wine than for use for fattening his hogs, he sold them to Mr. Clark. Upon weighing the fruit he informed me there were ten tons from the acre. The next year he informed me he took twelve tons from the same spot. Estimating the crop at the low price of \$15 per ton, his first year's crop would give him \$150, and his second crop \$180.

A person living ten acres would realize a fair income from the product of his small farm. We think the possibilities of our county are only just beginning to be understood. Instead of raising a single article and taking the chances of a failure one year in three, we are now commencing to learn that farms that are measured by the thousand acres, and devoted to wheat, are not as valuable as the same land in small tracts and cultivated to better advantage. Some of our large farmers are land poor. If land is worth \$50 per acre to grow wheat, what would it be worth if devoted to grapes? One thousand acres it divided into twenty-acre lots could have fifty homes upon it, giving us a population to trade at our towns, to increase our schools and lessen the distance our children are compelled to go for educational advantages, and last but not least, double the number of subscribers for our paper.

#### PREPARING TO IRRIGATE.

A traveling correspondent of the *Marysville Appeal* writes to his paper that the people of Colusa county occupying lands west of the Sacramento river are earnestly considering the question of irrigation. It is proposed to convey the waters of Stony creek through the dry section of the county. Yolo farmers have profited greatly by a few irrigation canals, and Colusa farmers there find a practical illustration of what water would do for them. Colusa is a rich county, but she would increase her wealth immensely by appropriating and using the waters of Stony Creek.

#### PLUMED PAMPAS GRASS.

The *Santa Ana Standard* states that the culture of this grass has become an important industry in the southern counties. The demands for the plumes come principally from the East and Europe. Last year one gentleman realized from the sale of plumes grown upon a few acres of land the sum of \$1,000. One Los Angeles firm is prepared to contract for all that can be produced. These plumes are grown in this locality with but little attention, and those who have vacant ground may derive profit by planting it with pampas grass.



## MINES AND MINING IN 1882.

The following facts and figures are taken from an elaborate article in a late issue of the *Mining and Scientific Press* of this city:

Since the year 1877, when the great Comstock bonanzas were yielding their millions, we have not had so productive a year from the mines of the United States as that of 1882. The total yield last year was \$92,411,883, which, compared with 1881, when it was \$84,504,117, shows a gain nearly \$8,000,000. It must be remembered also that 1881 was the best year in ten or twelve, except the memorable years 1876 and 1877, when we were producing in the nineties. The main increase last year comes from Colorado, Idaho, Montana, Utah and New Mexico, and in all of these regions a great many new mines have been operated.

Until a few years ago, California and Nevada overshadowed all the other mining regions of the United States. Then, when the Comstock bonanzas were exhausted in Nevada and the Leadville discoveries in the State of Colorado were developed, the latter took the lead, California still being second and Nevada third.

One thing should be recollected in this connection that is often forgotten: What may be a big development in a new region might not be considered so in an old one. When a lot of men are prospecting a claim and good ore is struck in a new camp, the fact is heralded abroad as one of great importance, and considerable attention is paid to it as arguing success for the camp in the future. The inference is that most of the other mines near by are just as good. But when the end of the year comes, and the results are all figured up, perhaps some quiet old camp has far exceeded the yield of the new and "boom" one.

For instance, a good many people imagine that California and Nevada are played out for mining, and that the mining industry is dead in both States. Yet, at the end of every year, these "played out" regions show a net product ahead of all the other States and Territories except one. They have remained second and third for some few years. The other Territories and States, much advertised and "boomed," with new mines, mill, reduction works, towns, railroads, and all other things, make a great deal more noise about what they are doing than do the old settled regions. California, for instance, last year yielded \$6,000,000 more than any other State or Territory, except Nevada and Colorado. She beat Nevada \$1,000,000, and Arizona \$7,000,000, and all the others ran below her. And this in the face of a depression of her grand mining interests resulting from litigation, which other regions are free from.

Very little capital is coming to this State or Nevada, but a good deal is going elsewhere. The other regions will no doubt progress rapidly, and it is hoped they will. But then people should remember that there are other places which are at work at mines, and are doing good work, too, as the results show.

A much broader region of mining ground has been prospected this year than ever before. Men have ranged over the mountains, in every direction, starting new camps here and there and everywhere. Railroads are being extended in all directions, and the mining interests of the country are being rapidly developed.

In New Mexico, Idaho, Montana, and Arizona considerable prospecting is going on. Colorado, Nevada, California, and Utah are now at work developing their old mines. Taken altogether, the work has been very satisfactory everywhere. More people are now interested in mining pursuits than ever before, and the people are just commencing to see that miners are not a set of stock gamblers. In fact, the operations at the exchanges have fallen off greatly, and many stocks will probably never be dealt in to the extent they have been formerly.

It cannot be said that California specially distinguished herself last year, although she still maintains, as we have stated, the second place in the list of bullion-producing States. She has been second ever since the big bonanzas of the Comstock placed Nevada No. 1. Now Colorado has displaced Nevada, and California takes Nevada's still maintaining the position she has held so long.

The southern part of the State is now being better prospected than ever before. The hills and mountains each summer are ranged over by a searching, careful set of men, hunting for the slightest indication of mineral wealth. Moreover, old prospects abandoned years ago, when tools, appliances, living, and everything else was high, are now being examined by the owners, who think, with changed conditions, they can be made profitable.

## A VALUABLE INDUSTRY.

The California dairy interest, it is said, possesses a capital of \$15,000,000, and produces annually a revenue to the State of \$9,000,000. This industry employs 6,000 laborers.

## SONOMA COUNTY.

In speaking of the rapid development of this county, during the last three years, the *Petaluma Land Journal* says:

The remarkable interest in lands in this section is not only felt in and around Petaluma and Vallejo townships, but all over Sonoma county. A short time ago farming, grazing and fruits lands, which could only be sold at lawyer's figures, are now, when re-offered, taken at prices which afford purchasers, who had the nerve to buy, very handsome margins of profit. It is difficult for one to realize it but it is true, that we are in the very infancy of advancement in this part of the State. In the near future, our population will double, our farming and fruit lands will be subdivided, and it follows as an inevitable sequence, proven over and over again, that by subdivision the yield is first increased, and an advance in prices will necessarily follow.

The increase in our farm lands is in no sense speculative. It is due to the gradual appreciation by the general public of the fact that there are advantages in this northwest coast section not possessed by any other part of the State. This experience has been wrought out by over 30 years of practical work in Sonoma county. During this long period we have had crops of cereals, fruit and wine in unbroken succession—the dry years elsewhere, being "bonanzas" in the coast country. Not only in the production of staple crops have we had unparalleled success, but in the production

of them, just at the time when it is most needed; hence not once in the history of this county have we had a failure of crops. This fact alone would be sufficient reason for the rapid development of Sonoma county, and when to this is added the luxury of living in the even temperature of the coast country, why should we search for other causes of progress.

There are almost fifty-five hundred voters in Sonoma county who may, for one purpose, be classed as producers. The products of the county for 1882, in wheat, corn, wool, fruit, hops, butter, poultry and live stock, was over six millions dollars in money. That much wealth was made out of the soil which did not exist at the beginning of the year. Query? when the producing population doubles, as it soon must, and the 850,000 acres, included in its far-reaching borders, are further subdivided, what then will be the products of the county, and what the value of lands that produce such wealth? Just think of their possibility and you must conclude that values are as much undervalued, at present, as they were ten years ago at the prices which then prevailed.

## A WHEAT-GROWING RIVAL.

The American Consul-General at Calcutta recently made a report to the State Department at Washington in which he states that India is coming into prominence as a producer of wheat, and he expresses the opinion that the time is not far distant when she will be a formidable competitor



SCENE IN YO SEMITE VALLEY.

of seed and stone fruits, and especially in the production of wine. The superiority of Sonoma wine is no longer disputed. It will compare favorably, and it is not too much to say that there is even now made in favored localities of this region, red wines that rival the best of foreign make. Each year, as a knowledge of the best varieties of vines to plant, and the science of viticulture is disseminated, this product of surpassing excellence, now limited, will become general, and the money value of the wine crop will equal all other products of the county. The soil and climate of Sonoma county seems equal to any demand made upon it; wheat, corn, hops, fruit and grapes find a congenial home. Upon the rich valley lands the coarser staples yield fifty-fold, and the lighter kinds will impart to the Burgundy or Chassoles grape, the delicate bouquet that has made the red and white wines from these varieties famous in Europe for ten centuries. The hop yards have also, for the last two years at least, yielded their owners a fortune in a single season.

The coast country is separated from the great interior valleys of the State by a range of mountains, and borders the ocean on the west. It owes its smiling crops to the sea drift of moisture which comes with the northwest trades about the end of the rainy season. To this excellent gift of the ocean is due the fact that our spring is prolonged late into June, which in less favored localities the season of growth practically ends in April. The moist sea drift presents an impassable barrier to the dry east winds of the interior, and supplies the requisite moisture to vegetation within its in-

fluence in the European market. Heretofore the United States has had almost the entire world for a market, but if India, with her vast territory, should prove to be a good wheat-producing country, and can place her grain in foreign markets at a figure that will enable her to compete with the United States, the situation will not be a pleasant one for American farmers to contemplate. Her present yearly supply is said to be 40,000,000 bushels, or about the average of California's annual export. This, of course, is not sufficient to cause the farmers on this side of the Atlantic any serious apprehension, but it is stated that India has facilities for increasing her product to an almost unlimited extent. This may or may not be quite true.

The ten leading wheat-producing States of America are Illinois, Indiana, Ohio, California, Iowa, Minnesota, Michigan, Missouri, Pennsylvania, and Wisconsin, the average yearly product of which amounts to some 320,000,000 bushels. In order to come anywhere near these figures, India must increase her yield ten-fold. She may be able to do so; and at all events the possibility of such a thing should set American farmers to thinking. If India should become a formidable competitor in the foreign wheat trade, our farmers will find it necessary to study economy in their systems of farming, which have heretofore been loose and expensive. With more economy in farming, America may be able to place her wheat product on the European market cheaper than India can, and thus, despite the extent of the latter's production, contrive to "hold the fort."—*Sacramento Bee*.

## THE WOOD BUSINESS OF TRUCKEE BASIN.

The wood business of the Truckee Basin is an small portion of its source of wealth. As is natural in every country where sawmills abound and lumber is made, coal wood forms a principal adjunct. Many large trees, 50 to 80 feet high, are cut down from which only one good saw log, perhaps twenty feet long, or even less, can be obtained, the remainder being cut up into firewood, and left to rot on the ground. Again, the lumbermen select his trees, and after the first cutting, a great many are left that are worthless, save for firewood. The woodchopper has the advantage of the means of transportation provided by the mill men, and fails not to use it. The thrane system, so universal in this section, renders the wood business particularly profitable. There is no hauling to market. The thrane take it from the forest and deposit it close to the railroad track, and thus save to the producer and consumer as well as the great expense that would attend did it have to be hauled in wagons. As a result, wood fuel is cheap and plenty. The Central Pacific, with its large number of engines, consumes vast quantities. Coal from after our load is shipped to the valley west and the country east, and piled in the wood sheds for use during the year. Something of an idea of the contribution of the Truckee Basin to this demand may be gleaned by knowing that Briscoe furnished, last season, 3,000 cords; Presser Creek, 5,000; Martin Creek, 6,000; Truckee, 18,000; Donner basin, 4,000; Donner Lake side, 3,000; Champion's, 3,000; Kuerland's mill, 3,000 total, 45,000 cords, all of which is purchased by the Central Pacific Railroad Company. The winter of '81 and '82 proved a cheap one for the railroad company. It was a mild winter, and the snow plows, which are the means of consuming large quantities, did not have much work to do. The best wood cut in the fall and winter, for the reason that the bark holds closer to the wood, and the railroad company always tries to contract for wood cut during the fall and winter months. The heaviest contractors in this section are Messrs. Sisson, Crocker & Co. and Elie, Ellen, Esq. These men handle large quantities of wood, and give it special attention. A glance at the figures shows that the industry is an important one. The supply may be said to be never-ending, and it is beyond the power of man to estimate when it will be exhausted. By the aid of thranes it can be brought to market at a trifling cost, and between the Summit and Verdi there are thousands of cords waiting to be secured up and fed to the hundreds of engines doing service on the rails of the Central Pacific. —*Truckee Republican*.

## SIERRA VALLEY.

The Sierra Valley *Leather* has the following article, showing how one of the finest mountain valleys in the State might be benefited by irrigation. It is situated in Sierra county:

The attention of capitalists is hereby called to some good investments for their surplus wealth in Sierra valley. There are at least 100,000 acres of land in the valley susceptible of producing the finest crops of hay and grain if a little moisture could be had during a short portion of the year. Most of this land would produce an occasional crop during favorable years, but the uncertainty of it has deterred people from cultivating it.

A very little water at the right time would insure a full crop every season, as the quality of the soil cannot be excelled. There is enough water annually going to waste in the spring to irrigate the whole valley twice over, if it could only be retained in reservoirs until two months later in the season. There are at least a dozen streams pouring their waters into the valley from the surrounding hills, and scarcely one which, somewhere in its course, could not be dammed and a little lake formed, whose waters could be held to be utilized in June.

In Greycroft Creek a dam could be constructed to hold in reserve enough water to irrigate at least 40,000 acres of land. This could reclaim all of the waste land on the west side of the valley, down as far as Beckworth. Then in Lost Chimney a reservoir could be had to irrigate all of the old land from the Summit to Beckworth. The Little Truckee irrigating canal could be extended so that water could be carried nearly to the Summit. Thus can be seen that by these three schemes alone the whole valley could be watered, and surely an acre but what could produce its bushels of grain or tons of hay.

There is not a rancher in the valley who would not give a dollar an acre to have his estate land irrigated. Here is a fortune for capitalists who are seeking a safe investment for their money. Land can be secured under the Desert Land Act which capital can secure for a song. Then they can conduct water upon it, making it productive, divide it into small tracts, and sell it to those in search of homes. The land could be quadrupled in value, and the profits to be realized from the investment would be enormous.



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, JUNE, 1883.

ESTABLISHED, 1870.  
Office—320 Sansome St., Hallock Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM.**

Six Months, \$1.25—Postage Paid.

SINGLE COPIES, 20 CENTS.

ISSUED MONTHLY.

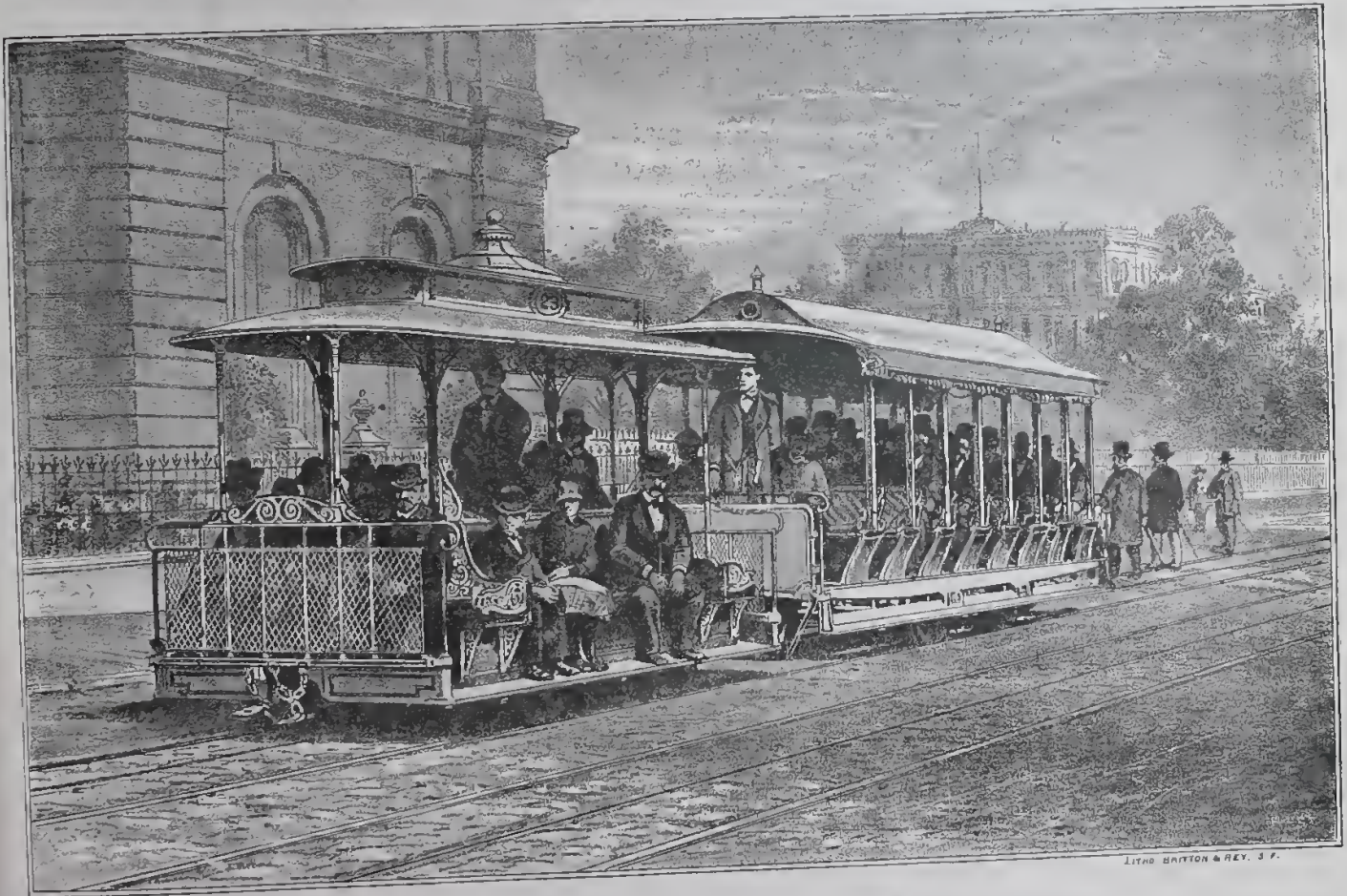
is bounded on the north by San Joaquin county, on the east by Calaveras and Tuolumne counties, on the south by Merced, and on the west by Santa Clara county, thus spreading across the entire width of the valley; its area embraces 921,800 acres of surface, 785,755 acres of this is sold and assessed, thus leaving 136,045 acres of Government land, the greater portion of which is stony and alkali and unfit for cultivation. Stanislaus is purely an agricultural and pasturable region, and has, in prosperous seasons, acquired the distinction of being the banner wheat-growing county of the State.

of cultivation, and although not so prolific, owing to the dryness of its nature, thrice the quantity of land can be cultivated with the same labor as on the tenacious adobe soil. The valley lands, which comprise the greater portion of the county, have a gentle, uniform slope, favorable to irrigation, are generally in a position to be well watered from the Stanislaus and Tuolumne rivers, and on the south from Tulare lake. The San Joaquin canal, on the west side, which is principally owned by Messrs. Miller & Lux, is now irrigating some 20,000 acres, and is intended to be carried down, in the near

future, through the county. Immediately south of Stanislaus lies

## Artesian Wells.

May be obtained at a depth of from 250 to 300 feet. Numerous wells have recently been successfully bored in the region along the San Joaquin river, which flows through the county in a northerly direction, dividing it into two nearly equal parts. The river here is a fine stream, 100



GEARY STREET CABLE-ROAD, SAN FRANCISCO.

## THE GREAT SAN JOAQUIN VALLEY,

—FIDELITY—

Stanislaus, Merced, Fresno, Tulare and Kern Counties.

[By the Traveling Agent of THE RESOURCES.]

In the April number of this journal we gave a description of San Joaquin county, which is the key to this great valley. A glance at the map of California reveals, in the San Joaquin basin, an area of territory exceeding 10,000,000 acres of tillable and pasture land, and many thousand acres of timber and mineral land, capable of supporting a tenth of the present population of the United States. Immediately south of San Joaquin county lies

### STANISLAUS COUNTY.

Its western line forms the summit of the Coast Range of mountains, while its eastern border runs on the foot-hills or base of the Sierra Nevada. It

The San Joaquin river, a navigable stream for six or eight months in the year, flows across the county, some eight miles west of the estimated geographical center. From that stream diverge two tributaries, the Stanislaus and Tuolumne, both leading eastward to the Sierras, and are navigable for three months in the year; they are on the east side of the San Joaquin river, which intersects the county from south to north. The

### Soil

Of the east side is of a sandy nature, verging to a loamy character as the foot-hills are approached. The soil of the west side is a rich loam of indefinite depth and, with an abundance of moisture, yields large crops of cereals. The large average yield, in favorable seasons of abundant rainfall, is an indication that when, in the future, a system of irrigation is inaugurated, by which these lands may be plentifully watered, their productiveness will insure the most bountiful returns for labor expended. The light, sandy character of the soil makes it easy

future, through the county. Immediately south of Stanislaus lies

### MERCED COUNTY.

Which is bounded on the east by Mariposa county, south by Fresno, west by Santa Clara and San Benito and north by Stanislaus county; it reaches from the summit of the Coast Range, on the west, to the base of the Sierra, on the east, and has an area of 1,155,336 acres. Fully three-fourths of the land in the county is susceptible of cultivation, the remainder being only suitable for grazing. Its general characteristics are not dissimilar to those of Stanislaus county. In seasons of abundant rainfall excellent crops are matured, the yield of wheat, in some classes of land specially adapted to its growth, being frequently as high as 50 bushels to the acre. The general failure of crops in a season of little rainfall, points forcibly to the necessity of providing a thorough system of irrigation, and it is gratifying to note that the lessons of the past, in this regard, are not unheeded, as the large land

yards wide and, for a mile or two on either side, the land is known as tule land, which in winter, during high water, is overflowed. It is devoted principally to cattle raising, and almost the entire body of swamp land, on the west side of the river, is owned by Miller & Lux, and is used for pasturing. The next river in size is the Merced, from which the county takes its name. Its average width is about 50 yards, entering the county near the northeast corner, and flows, at first, rapidly along, forming a magnificent water-power for manufacturing; as it leaves the San Joaquin, it becomes more quiet and milts with that river near the middle of the northern boundary of Merced county.

### Bottom Lands.

Along this river, throughout the county, elevated a few feet above high-water, are the bottoms of the Merced, composing the richest alluvial soil, and producing the finest crops of grain, cotton, corn, vegetables, etc. In places, at high-water, these bottoms are overflowed, but only immediately



along the river, and not for a sufficient time to interfere with their cultivation. Immediately south of Merced lies

#### FRESNO COUNTY.

This is the third county in area in the State, containing 5,600,000 acres of surface. Of this vast territory 4,400,000 acres may be classed as mountainous and pasture lands, and about 1,200,000 as agricultural and fruit lands. This county lies principally between the 36th and 37th degrees of latitude, and is very nearly the central part of California, extending northeasterly and southwesterly a distance of 120 miles, and its average breadth is something over 65 miles. It is bounded on the north by Merced and Mariposa, on the east by Mono and Inyo, south by Tulare, and west by San Benito and Monterey counties. The summit of the Sierras forms its eastern boundary, the summit of the Coast Range its western, and the general course of the Coast Range river its northern, and King's river its southern boundary.

#### Topography.

The central portion of the county comprises a large part of the Great San Joaquin valley, its lowest portion contains about 300,000 acres of marsh and low lands, formed by the waters of King's river, and during high water being partly covered with the mingled waters of King's and San Joaquin rivers. The eastern two-fifths of the county is mountainous, comprising the highest portions of the Sierra range, and the most elevated mountain region of the United States, extending from Mount Lydell, on the north, to Mount Tyndall, on the south, a distance along the range of over 100 miles. Within this region rises the Fresno, San Joaquin and King's rivers, amid perpetual banks of snow and ice. Fresno contains forty living glaciers, some of these lying under the crests of the Palisades being some two miles in length; and, also, many of the loftiest peaks in America: Mount Goddard, Mount King, Mount Gardner and Mount Tyndall, are upwards of 14,000 feet above sea-level, while a large number of other peaks approach very nearly that height. There is no pass over the summit less than 9,000 feet above sea-level. On the westerly slopes of these ranges are found the heaviest bodies of timber in the State, and in several localities groves of the

#### Big Trees.

Or "*sequoia gigantea*," in which some single trees are found measuring 120 feet in circumference. Of the 5,500 square miles of mountains in Fresno county at least four-fifths are in the Sierras. These may be divided into three distinct divisions or zones; the foot-hills bordering the plains and extending back from twenty to thirty miles to the distinctly outlined pine ridge or timber belt. These foot-hills commence at an elevation of 200 feet and are covered with scattered oaks, increasing gradually, as the mountains proper are neared, to 2,000 and 2,500 feet, when they suddenly rise to an elevation of from 4,000 to 5,000 feet, and are covered with a heavy growth of pine timber. The timber belt reaches back from 30 to 40 miles at an elevation of some 10,000 feet, the higher regions being covered only by dwarfed and scattered tamarack. The high Sierras proper cover a belt of about 30 miles, are nearly devoid of brush or timber, and are broken into deep chasms, jagged and lofty peaks, ancient glaciers, basins and present fields of ice and snow. As it is the highest, so is it the wildest and most interesting mountain region in the United States. The geological formation of the entire mountain chains are as diversified as the fauna or flora. The

#### Foot-hill.

Regions are generally granite, cut across from north to south, or southwesterly, by occasional seams of slate and frequent narrow seams of quartz. In some sections large masses of white, flinty quartz are found, and in these localities the hills are covered with reddish clay. There are no extensive acres, and the numerous small ones that have been worked are, as a rule, confined to the foot-hills.

#### Valley.

The territory of Fresno county, 2,092,800 acres, a little over one-third of its total area, lies in the great San Joaquin valley. This valley, calculated from the Sacramento river south to Fort Tejon, has a length of about 250 miles and an average breadth of about 50 miles. Kern lake, at the extreme southern portion of the valley, has an elevation of 282 feet above sea-level, and 200 miles from the mouth of the San Joaquin. Its waters connect, by a series of sloughs and small lakes, with the waters of Buena Vista and Tulare lakes, which latter has an elevation of 200 feet and an area of 700 square miles. Tulare Lake connects with the San Joaquin river by Fresno slough, about 60 miles north. From Tulare lake north to the Sacramento river, the valley has a nearly uniform fall of a little more than one foot to the mile in its lowest depression, while the slopes from the foot-hills, on either side, toward the center, average about six feet to the mile. The valley portion of Fresno county occupies a section about 60 miles square. Its lowest depression is one-third nearer the Coast Range than the Sierra Nevada. King's river may be said to form its southern boundary, while the San Joaquin, as it flows from the mountains, divides the territory of the east side of the valley nearly in halves. Taking Fresno slough and the main San

Joaquin river, after it turns northward, as the dividing line.

#### Two Distinct Regions.

Are found, distinct in rain-fall distinct in soil, distinct as to depth and character of water, and the general facilities for irrigation and cultivation. The territory of the east side is about twice the area of the west. Good water is found under its whole extent, at depths varying from six to ten feet; bordering the slough, or main river, to 80 feet; nearer the foot-hills, and again being found at shallow depths in all of its canyons or dry creeks immediately bordering the foot-hills. This valley appears to the casual traveler like a vast level plain, while it is by no means either level or unbroken. Distinct ridges and depressions can be traced from the foot-hills to the center of the valley, while the land bordering the streams is generally higher than the intervening territory. As an illustration, the bluff banks of the San Joaquin river, at the railroad crossing at Sycamore, are over forty feet higher than the land at Fresno, ten miles southeast. The dry beds of many creeks and streams flowing only in winter can be traced far out on the plains. Wells, dug and bored at different points, have located the beds of ancient creeks or rivers now buried beneath twenty feet of sand and soil. In a large bed of country, bordering the San Joaquin river, extending back a distance of ten to eighteen miles, flowing

#### Ancient Water.

Has been obtained, at depths of 150 to 200 feet, east of a given line; nearer the foot-hills flowing water has not been obtained, though borings have been made to a depth of 500 feet. On the lower King's river flowing water is had at 150 feet. The general slope of the country is southwest, or more nearly west, the rise being very little for several miles from the slough, and generally increasing, as the foot-hills are neared, until, at the city of Fresno, it is six feet to the mile, and, nearer the foot-hills, it is ten feet or more. Before irrigation was practiced, water seemed to occupy a common level under the entire slope, it being only necessary to know the elevation to ascertain the depth to water. Since canals have been constructed and water distributed over the plains, the entire section has been filled with water, and now, in the vicinity of the various canals, the water level is found at from two to ten feet from the surface. It is quite evident that the process of change wrought by the present system of irrigation will eventually extend to the entire region of almost desert dryness and barrenness to one of moisture and vegetation.

#### Soil.

What we have said of Stanislaus and Merced, can also be said of this county, as it has almost every variety of soil, and a dozen varieties may be found, even, within an area of two miles square. As a rule, the nearer the hills the harder the land, though there are some exceptions. Land that is known as bog-wallow, lies in waves like the waves of the ocean, with an elevation and depression of several feet, and about 20 feet apart. These lands are generally solid and often gravelly, and the bog-wallows are most numerous near the hills. North of the San Joaquin river the hills and border lands are of granite formation, the bog-wallows extend as far out upon the plains as the railroad, in some places, but between the railroad and the San Joaquin river are long stretches of level, solid and rich land; in some places it is exceedingly rich, the soil being what is known as ashey land, and especially adapted to irrigation. Along the foot-hills, south from the San Joaquin river, are several miles of red clay land, mixed with white quartz, as much like the Malaga grape lands of Spain as could be. Strips of this land extend as far down upon the plains as Fresno. The great bulk of the plain land of the entire eastern slope, however, is a soft, sandy loam, mixed with clay, sand, decayed animal and vegetable matter, iron and other mineral salts. Generally speaking, the San Joaquin valley lands are free from alkali. There are strips of land several miles in extent, bordering the Fresno slough, in which the alkali is so abundant as to render the land almost valueless. Experience has demonstrated that, under proper cultivation, and in ordinary seasons, the reasonably solid lands, throughout the county, will yield fair crops of grain. When water has been applied the results have been marvelous in the production of grain, grass and fruit. The adaptability of the lands for fruit and agricultural purposes, the changes that occur in their characteristics, by the application of water to the various soils, show gratifying results in the greatly enlarged number and importance of the different products.

#### West Side.

The country lying west of the San Joaquin river is unlike that on the east, while much of the land is black and rich; but the small amount of rainfall and apparent impossibility of obtaining water, even for drinking purposes, makes this region practically a desert. A large canal has been constructed, which has brought several thousand acres under cultivation. Other than this, the valley land proper, lying between the low lands of the slough and the Coast Range foot-hills, is unowned and unoccupied, save by sheep-owners, who take advantage of the free range at certain seasons of the year.

#### TULARE COUNTY.

Lies south of Fresno. The topographical features of the county are marked and distinctive, being made up of mountain, lake, valley, swamp and overflow lands. About 2,000,000 acres are mountain; the highest peaks of the great Sierra range fringe the eastern border: Mount Whitney, 15,055 feet high; Mount Williamson, nearly the same height; Mount Tyndall, 14,384; Mount Kaweah, 14,000; and others, exceeding 50 in all, of over 13,000 feet above sea level, are grand sentinels of the Sierras, towering above all other lands in the United States. The scenery among these mountain peaks is of inexpressible grandeur; granite walls, like Cyclopean masonry, rise, with perpendicular face, many thousand feet above the dark canyons they enclose, and serrated ridges of needle-pointed rocks run in confused irregularity from peak to peak. Bright meadows are in the deep valleys, once filled with ice in the glacial period, and the gigantic trees, of 115 to 120 feet in circumference, and near 300 feet high, are found on the mountain sides, at an elevation of 5,000 to 6,000 feet above the sea.

About 1,000,000 acres of the county is broken land, with small, elevated valleys, susceptible of settlement, where the herdsmen keep their flocks of sheep and cattle in summer. About 1,000,000 acres of the highest mountain section are entirely valueless for settlement, as they are one perpetual sheet of snow, ice and rocks.

#### Tulare Lake.

Is the largest body of fresh water on the Pacific Coast. It covers an area of about 230,000 acres. Around the margin of the lake, formerly covered by water, is now dry land, which is being cultivated; large portions of it will become the best land in the valley, as the water of the lake is receding year by year. The greatest depth is only about 60 feet. The lake abounds in fish and millions of aquatic fowl. It has an overflow outlet into the San Joaquin river, and seems, by nature, to have been placed as a great reservoir for the storage of water to irrigate the arid west side of this great river.

#### KERN COUNTY.

Last of the great chain of counties of the San Joaquin valley is that of Kern, which is bounded on the north by Tulare and Inyo, east by San Bernardino, south by Los Angeles, and west by San Luis Obispo. It derives its name from the great Kern river itself, being named in honor of Lieutenant Kern, who accompanied General Fremont on his early exploring expedition to the Pacific Coast. Here the valley comes to an abrupt end, being shut off by a high surrounding chain of mountains, forming the main chain of the Sierra Nevada and the Coast Range. The valley portion of the county, although covering nearly 1,000,000 acres, is but a small portion of the county, as the entire area is 5,137,920 acres. The

#### Topography.

Of the county is exceedingly diversified. The chaotic jumble of barren mountains, where the two great ranges unite together with the vast sandy deserts that encompass them on either side, form a confusion of the most forbidding elements of nature. The redeeming feature of Kern county is the noble river, that heads in the mountain fastnesses of Tulare county, and breaks through the titanic hills, down a deep, precipitous gorge, descending many thousand feet in a few miles, and rolling out upon the plains. As it reaches the valley it spreads into devious channels, making a large delta, which is called Kern Island. So copious is the stream that a slight impediment made it fly off on a tangent, a few years ago, cutting a new channel, whose mouth was 35 miles from that of its original bed. Kern and Buena Vista lakes receive the water of the river, and, in turn, discharge it into Tulare lake. Some of the most productive farms in all California have been made on Kern Island, within the past few years, where naught but grass and sage brush formerly grew. This has been accomplished by means of a liberal expenditure of capital in the construction of irrigating canals, which now ramify all parts of the island. Without irrigation very little would be produced in Kern county. An ample supply of water is furnished by Kern river, which has a drainage area of 2,383 square miles. The annual rain-fall of the valley rarely exceeds three to four inches, which is sufficient to mature any kind of crops. The capital expended since 1874 amounts to more than \$1,000,000. There are a number of large ranches under cultivation and irrigation, the largest being those at Messrs. Huggins & Carr. The present development of the agricultural interests of Kern county is so largely due to the enterprise of these San Francisco capitalists, that, without them, this county would have been in a comparatively wild condition.

#### Climate of the San Joaquin Valley.

The following paper on the climate of this region was prepared by Dr. G. A. Shurfield, medical superintendent of the State Insane Asylum in the city of Stockton, an eminent authority.

The climate of the different sections of our coast presents, like that of Mexico, some striking and most agreeable varieties. Heat and cold, irrespective of latitude, occurs in certain places regularly from observable physical causes which are local;

and humid winds, or arid calms, or grateful breezes characterize the climate of localities within comparatively short distances from each other—the manifest result of the configuration of the earth's surface. Thus in the great basin of the San Joaquin, the process of heating and cooling, of atmospheric rest and motion is carried on during summer, with almost the regularity of the ebb and flow of the ocean tide. Near the coast, and stretching along for hundreds of miles parallel with it, this immense valley is effectively cut off by the eastward flow of mountains from the air of the sea, during the latter part of the night and fore part of the day, while the atmospheric equinox is undisturbed by local rarefaction. But as day advances the sun warms and heats and rarefies it: repassing atmosphere of the valley, the equilibrium is at length temporarily destroyed, and soon after mid-day, the heavy cool sea wind, put in motion and hurried on to restore nature's disturbed balance, comes sweeping up the outlet of the valley, and through the passes of the coast mountains with uncomfortable force and frugidity. With no obstacles to impede or deviate its course, it pursues the broad line of the great river of the south, passing over our city and the lower part of the valley in a northern course, fresh and cool, gracefully tempered and moderated as it commingles in a first meeting with the soft, warm air of the interior, and spreads out over the wide expanse of green fields in which the valley terminates. In this way by a law of nature, the whole basin is filled daily, during the summer, with the invigorating atmosphere of the ocean, aided somewhat in the night by the descending cool air from the snowy crests of the Sierras. With a temperature thus equalized and an atmosphere thus daily refreshed, the valley of the San Joaquin possesses a climate eminently conducive to both the comfort and the health of man. The climate of California has been not inappropriately compared to that of Italy in the equality and agreeableness of its temperature. No equally extensive section of the state possesses in so eminent a degree those desirable climatic characteristics which justify this favorable comparison as does the valley of the San Joaquin. Low down the valley, about midway between the two mountain ranges, the temperature is almost exactly that of Naples, as the following record of thermometrical observation will show:

	Naples.	Stockton.
January	46	41
February	47	52
March	51	58
April	56	60
May	64	64
June	70	74
July	76	76
August	76	74
September	69	69
October	61	67
November	53	56
December	49	48

The foregoing table represents the mean temperature of each month of the year in Naples and in Stockton, the temperature of the latter place being taken from the record kept by Dr. R. E. Reid, and embracing a period of four years.

Along the coast-side of the lower part of the valley the climate is much cooler in summer than it is in Stockton, the high winds prevailing in the afternoon as in San Francisco, while far to the southward along the foot-hills of the Sierras, it is much hotter during the same season.

In regard to the healthfulness of the valley, to say nothing of the sanitary effect of the rapid desiccation and curing of most of the spontaneous vegetable productions when the dry season commences, this daily atmospheric current is constantly sweeping away their incipency, the miasmatic exhalations and pestilential fermentations which might otherwise incubate and brood undisturbed over the rich bottom lands near the mouths of the tributary streams. In this unavoidable purification, carried on and forever to continue in obedience to the preservative and unalterable laws of nature, we have the promise of the future healthfulness of our increasing population. The experience of the past, too, may well inspire confidence. Carefully kept and scientifically arranged neurological tables extending back more than ten years, show in this city a rate of mortality which compares favorably with the most healthy places on the globe; the ratio of mortality exclusive of deaths from external causes or violence, being annually only one death to 65 of the population; while in Norway the ratio of mortality is one in 56; Sweden, one in 19; England, one in 44; France, one in 44; Prussia, one in 36; Rhineland, one in 16; Baltimore, one in 31; New York, one in 38; United States (as shown by the uncorrected estimates of the eighth census), one in 45. Epilepsies and virulent infections have been rare and disinclined to spread, and the more general and mild temperature of this sheltered region tends to stay the development of pulmonary affections and diseases of the respiratory system, while the chilling fogs and harsh winds of the coast are liable to provoke their dreaded attacks.

Along the estuaries of the San Joaquin river, and at the mouths of its tributaries, malaria is sometimes ungendered, and intermittents, in a mild form, prevail, to some extent, late in the summer, notwithstanding the unflinching sanitary influences of our post-meridian winds. But when we consider that these dark borders and low bottoms, so



account of their moisture and supposed richness, were the first, and in some sections, until recently, the only part of the valley which were settled, and that even now they are seldom objected to by the experienced on account of their unhealthfulness, and when we further contemplate that these are but the narrow water lines and terminal borders of a valley whose length is estimated by hundreds of miles, and whose breadth is measured by the meridian lines of longitude; whose healthful and productive acres extend far away out of sight of the regions of winter floods or autumnal miasm, we may confidently feel assured of a population in this rich and truly magnificent valley, not only healthful in the usual freedom from bodily ills, but healthful in every essential interest which tends to constitute a wealthy, prosperous and happy people.

#### Interests.

This great valley is well supplied with railroads. The C. P. R. R. runs one of its branches from San Francisco to Sacramento via Stockton. Nine miles west of Stockton is its junction with the Southern Pacific, which traverses the entire length of the valley, with branches from Goshute to Visalia, the county seat of Tulare; from the former place is the Hanford division, running in a northwestern direction, and will soon intersect with the northern division of the same road, which is now completed

millions of actual settlers and tillers of the soil.

The present population of these six counties, embracing the entire San Joaquin valley, is about as follows:

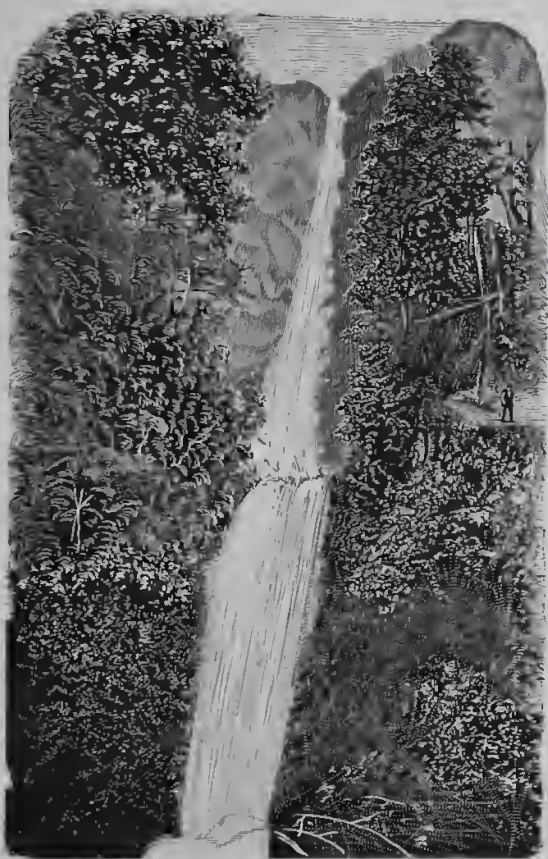
	Population.	No. of Acres.
San Joaquin	32,000	928,000
Stanislaus	10,500	924,800
Merced	6,500	1,155,336
Fresno	14,000	5,600,000
Tulare	13,000	4,100,000
Kern	4,000	5,137,920
Totals	81,500	18,816,056

Thus it will be seen that here is a territory of nearly 19,000,000 acres of area, of which fully 10,000,000 acres are valley and susceptible of irrigation and cultivation, and fully 2,400,000 more are low, rolling foothill lands, and, at present, sparsely settled, which might also be said for our whole State.

The greatest want of California since the influx of pioneer days has been that of immigration—settlers who would make it their home. Earliest but spasmodic efforts have been made in the past to induce a part of the moving stream of humanity that flows from Europe to America, and from one state of the Union to another, to make California its objective point, but the result has been unsatisfactory. The reasons why immigrants preferred

west, and from New Orleans the railroad controls a connecting line of steamers. The European immigrant can take passage direct to New Orleans, and the railroad company can from that point have full control of him, and will not have an intermediate line to raise the price of transportation so high as to amount to a prohibition of immigration to California. With these advantages in its possession, it has begun a movement to attract to this State desirable immigrants, and has established immigration bureaus at Chicago, London, Bordeaux, Berlin and Gottenburg. I. N. Hoag, well known in this State, and familiar with the agriculture and capabilities of California, is the Central Pacific immigration agent at Chicago. At the other points, men similarly well fitted for the trust are stationed. Each is paid by the railroad company, and the information given is not a tax upon the immigrant. These agents are under contract to make truthful reports concerning California and the lands inquired about, and on no occasion to set forth exceptional cases of production, climate or capabilities for the purpose of inducing immigration. The facts only may be given, and facts which are not exceptional, but the rule. Thus, with regard to grapes, they are not to instance cases where the yield is twenty or thirty tons to the acre, but are to set forth simply that in all cases a yield of five or six tons can be

one with another. The fruit raisers have told how much it will cost to plant an orchard, what it will yield the first, second and third years, how much it will cost to maintain it, etc. Viticulturists and stock raisers have also been sending in valuable and reliable information, all of which will be spread among the people of the East and Europe. Persons having any information about the resources of their localities throughout the State can aid this movement if they will place it at the disposal of the company's agents. This information is not asked for those who have made up their minds to immigrate, such have already, almost without exception, a definite destination, but for intending immigrants who are inquiring about and investigating the prospects of the country they intend making their future home. All facts regarding land that can be obtained, its character, etc., will be given to the agents of the railroad company. People who have land for sale have only to write a true description of it and send it to the agents to have the information placed before a large number of the most desirable class of people. The Chicago agency will maintain an exhibition of California products, each product in its season being forwarded by the railroad company, and persons or associations wishing to make an exhibit of the productions of their lands, can have it forwarded by ex-



MULTNOMA FALLS, COLUMBIA RIVER.



LA TOURELLE FALLS, COLUMBIA RIVER.

south from San Francisco via San Jose, Salinas City to Soledad. There is, also, the San Joaquin and Sierra (narrow-gauge) road, which is now complete from Brock's Landing via Lodi to Wallace, which lies in the foothills of Calaveras county. This road is intended to be built up to the Big Trees and an immense timber belt on the western slope of the Sierra mountains.

#### Water Facilities.

A glance at the map of California reveals the fact that this great valley is susceptible of being irrigated, as there are numerous streams all along the western slope of the Sierras, from one end of the valley to the other. The principal rivers, beginning at San Joaquin county and going southward, are: the Mokelumne, Stanislaus, Tuolumne, Merced, Fresno, San Joaquin, Kings, Kern; there are a number of smaller ones bending up in the Sierras, amid perpetual snows. These streams all break through rocky gorges, affording the best of facilities for harnessing the water in reservoirs for future use, so that every acre of this vast country can be irrigated, when once properly settled and owned and controlled by actual settlers.

Large amounts of capital are now invested, both by the proprietors of the S. P. R. R. and by private companies, in bringing the waters of the Merced, Stanislaus, San Joaquin and Kings' rivers into some of the valley lands. Corporations are being organized in all the counties south of Stanislaus, and it will not be long before this valley, which now has less than 82,000 inhabitants, will have

other sections of the United States are obvious. The Pacific Slope is a long way from the place where the intending settlers start; it takes time and considerable money to reach here. Reports, uttered by local journals and speakers, and scattered broadcast by interested parties, that all the available land in California was controlled by monopolies or held by speculators, that freight charges eat up the profits of producers; that Chinese competition was reducing the laborer to a condition of servitude—all these and other misrepresentations have diverted from the Golden State thousands of immigrants from the East and Europe. There has lately been inaugurated, however, a movement that, it is hoped, will counteract these influences and induce immigration to this State—not the impoverished classes that pour into the Atlantic seaports, but the better classes who are seeking places in which to make permanent homes. It is this latter class that has increased the population and prosperity of Kansas, Nebraska, Minnesota, that is now pouring by tens of thousands into Dakota and following the progress of the Northern Pacific railroad. This new work has been started by the Central Pacific management. It is the result of long investigation, and has been inaugurated only after it has been practically demonstrated that the end sought for can be accomplished. The Central Pacific feels assured it can control the immigration to this State through its southern route to New Orleans. Cheap transportation down the Mississippi river can be obtained from the states of the North-

relied upon. Exceptional instances of productiveness are held to be, in the long run, injurious to the interests of the State, and will not be set forward as inducements for immigration. The railroad company has taken unusual pains to disseminate facts about California lands—not only its own possessions, but the holdings of individuals. The agents of the company will not negotiate the sale of any of these lands, but will give inquiries any information concerning them they have in their possession. Several large landholders in the State have already practically indorsed the action of the Central Pacific, and have listed large blocks of their land in the different agencies. The railroad's land bureau is engaged in reviewing the prices of the company's lands. The company, however, assures parties having land for sale that lies near its own that it will not give their own property preference over other lands offered for sale. Extreme care has been taken—and the same caution will continue to be exercised—to obtain the most reliable information about the products of California. The opinions of gentlemen of standing, who are noted for their experience and success in the various departments of agriculture, were solicited upon the capabilities of the soil in their localities, and they were also solicited to give the fullest information concerning the yield of crops, the cost of raising, cost of handling, profits and all kinds of similar information that an intending homeward would wish to know. Thus the great wheat farmers have given reliable figures which have been compared

press to Chicago by properly boxing it, and sending it in care of the company. The Chicago agency will also furnish information about California to any one applying. At the European agencies all the information received from here will be translated into the language of the country where the agents are stationed, and spread among the people.

Particular attention is now being directed to inducing Bohemians to immigrate to California. They are a rural people, tractable, honest and industrious and skilled in vine-dressing and wine-making. They are among the best of Austrian subjects. Many of them have settled in Iowa, Wisconsin, Texas and other states, and are considered among the very best class of settlers. In many places where they are located they have taken up land that others rejected, and by their perseverance and knowledge they have made it beautiful and productive. Besides their knowledge of viticulture, the Bohemians are noted for their skill as market gardeners.

Special efforts will be made at the Chicago agency to procure farm help, which will be so much needed in the future, and the pressing needs for the coming harvest are already beginning to be felt. The demand for agricultural laborers for the ensuing four or five months will be unprecedented, and the number now in the State will supply but a fraction of the farmers' wants.

#### Land.

All over the valley, is constantly enhancing in value every year. There is a large acreage planted



to fruits and vines, and thousands of acres that, a few years ago, were considered almost valueless, which now have water ditches; are being sold and rented to farmers. Thousands of acres are for sale, and can be bought at quite reasonable prices, ranging from \$10 to \$100, owing to improvements and location.

To people unacquainted with this great valley, we would say, this is not a wild, uncultivated plain, but, on the contrary, it has beautiful cities and towns scattered all along the lines of the railroads, which we will name in their order, beginning at

#### Stockton.

A city of about 15,000 inhabitants, located on several lines of railroads, and also at the head of tide water, where steamers of 600 tons capacity make daily trips to San Francisco, a distance of 117 miles. The second town of any note, going south, is

#### Modesto.

The county seat of Stanislaus county, located on the line of the S. P. R. R., 103 miles southeast from San Francisco. It is situated in a healthy country, and now has a population of about 2,500 people. Modesto is a new place, the town being laid out in the fall of 1870. Here is one of the finest agricultural valleys in the State. Large crops of grain are produced annually, and recently the people are turning their attention to the raising of fruits of all kinds, and it is found that this will become one of the finest fruit sections in the State. Forty-eight miles further south, through a productive valley country, brings us to

#### Merced City.

The county seat of Merced county. This place has a population of 1,800. The land in the vicinity is principally owned by large land owners, who are bringing the waters from various streams upon it for the purpose of irrigation. At present, the principal crops raised are wheat and barley. A few miles to the west lies the noted

#### Bubach Plantation.

The plant from which the "Bubach" powder is produced is grown principally in Dalmatia, Herzegovina and Montenegro provinces in southern Austria. An infusion from the stems and leaves destroys all classes of insects on fruit trees; it also makes a wash for curing scab on sheep. From the blossoms is manufactured the powder called "Bubach," which, for destroying fleas, flies, mosquitoes, moths, and other insects, it is said to be good. The great value of this insect destroyer is, that while it is a dead shot to all insects, it is, at the same time harmless to mankind. The plantation contains 1,440 acres of nearly level land; water is brought on, and the plant is carefully cultivated and irrigated. The property is owned by J. D. Petrus, of Stockton, and G. N. Milco, who resides on the premises. Forty-five miles further south brings us to the most enterprising town in the valley, that of

#### Fresno City.

Which now has about 3,000 inhabitants. In the immediate vicinity are several colonies. The Central is the oldest, and was started in 1875; immediately south is the Washington colony, and adjoining the town is the Fresno colony. The land lies in close proximity to the line of the S. P. R. R. These lands are divided into twenty-acre farms, and with each lot is sold a perpetual water right, for the purpose of irrigation. This water right consists of one-eighth of a cubic foot of water per second, and is furnished from a canal or main feeder, which is brought from King's river, across the plain, a distance of twenty miles. The only expense accruing from using the water is an annual payment of \$12.50 per lot, to the canal company, for maintaining the chief canals. The soil here is a rich, sandy loam, and is well adapted to fruits, vines, alfalfa, etc. Fruit canneries and wineries are established at Fresno, thus affording ready sale for the fruit and grapes grown in the different colonies. Fresno City has built thirteen brick blocks during the present season, and the prospects of large fruit and grape crops will cause others to be built. Fifteen miles further south, on the line of the railroad, is

#### Salton.

A shipping point for wheat, wool and live stock. Six miles further south is Kingsburg, situated in a fine agricultural country. The former town contains about 500 people, and the latter about 400. One of the oldest towns in the valley is

#### Visalia.

The county seat of Tulare county. It lies 230 miles southeast from San Francisco, and is some eight miles from the S. P. R. R., but is connected with this great thoroughfare by the Visalia Railroad. Visalia has about 2,000 inhabitants, and lies in a fine agricultural and fruit country. The second largest town in the county is

#### Hanford.

Which lies some 22 miles west from Visalia, and is on the Hanford branch of the S. P. R. R. It is situated in a good country.

#### Tulare City.

Is the terminus of the northern division of the S. P. R. R., 251 miles south from San Francisco. The railroad company have large repair shops here. This is also a fine agricultural country, and arisan water has, recently, been obtained by boring from 150 to 300 feet. Fifty-five miles further south brings us to

#### Bakersfield.

Which lies at the head of the valley. It is located on Kern river, in a level country. Large amounts of capital have been expended in bringing the water on to the barren looking country, which now produces alfalfa, grain, corn, cotton and almost any kind of crops. Bakersfield has about 1,000 inhabitants.

All these cities and towns have as good schools and educational advantages as similar sized places in any portion of the United States.

#### THE QUALITY OF WINES.

Mr. F. Phudriff, of St. Helena, who is an expert in wine-making, and has an European experience, gives it as his judgment that the manufacture of California wines is constantly improving their quality. The wines of to-day are not the crude, vinegary, over-alcoholized productions of a few years ago, but through expert handling, blending and attention to the variety of grapes from which they are made, are assuming a shape and quality that must eventually give them a rank with similar pure imported wines. Mr. Phudriff, in reviewing the character of native wines from the vineyards and cellars of California, comes to the conclusion that our best products will soon sing their own praises, and will need no extolling by mouth or type. He says: "There are capitalists in our midst who have entered into the grape growing industry in the right spirit; experience has effectually taught grape growers that quality is the best safeguard against the necessity for sacrificing their product—pride of the quality of the latter is awakening the vigneron. High class varieties of the vines are coming into the country from abroad, and what is of merit is being eagerly adopted and multiplied. Facts have already proved that this is the right way to go to work, and when we shall be in possession of high class vines, the next step, will be taken naturally to establish nursing cellars. California will then become possessed of stocks of matured wines, and results can then be waited for with patience. Discussions of possibilities or the reverse will then be needless. Our vineyards and cellars, modest as their extension in the aggregate will remain, even if the planting boom will be kept up at a higher rate than at present, will hold their own in the near future, and varieties of wines will be seen, to which a fastidious palate from any country must render justice. If in planting for quality there be equal thought given to raising light, sound, ordinary table wines at moderate, or better said, low prices, in order to let them be accessible to every American, the industry will undoubtedly prosper."—*Napa Reporter*.

#### VALUABLE INTEREST RULES.

[Basis, Commercial year of 360 days, or 30 days per month.]

- 4 per cent.—Multiply the principal by the required number of days, divide by 9, and point off.
- 5 per cent.—Multiply by the number of days, and divide by 72.
- 6 per cent.—Multiply by the number of days, divide by 6, and point off three figures from the right.
- 8 per cent.—Multiply by the number of days, and divide by 45.
- 9 per cent.—Multiply by the number of days, divide by 4, and point off three figures from the right.
- 10 per cent.—Multiply by the number of days, and divide by 36.
- 12 per cent.—Multiply by the number of days, divide by 3, and point off three figures from the right.
- 15 per cent.—Multiply by the number of days, and divide by 24.
- 18 per cent.—Multiply by the number of days, divide by 2, and point off three figures from the right.
- 20 per cent.—Multiply by the number of days, and divide by 18.

The interest in each case will be in dollars and cents.

#### CARP RAISING.

The stocking of fish ponds with carp and the raising of that delicious fish for the market is beginning to attract great attention in this county. Mr. Osborn, of Upper Tule river, was the first to engage in this business here only a few years ago, and he has since sold young stock carp in nearly every county in Southern California. In the vicinity of Mr. Osborn's place, and also on Tule river, George W. Duncan has two ponds stocked with carp. The two ponds are two and a half acres in extent and four and a half feet deep, with fresh water continually running through them. Last year the fish with which the ponds had been stocked grew with surprising rapidity, but for some reason they did not spawn. When they were put in the ponds they averaged a pound in weight, and in less than a year the average weight was six pounds. Nothing was fed to them, the vegetation in the ponds furnishing an abundant supply of food. This year they

are expected to spawn, and in anticipation of this event Mr. Duncan is having another pond dug. He proposes to increase the number and size of his ponds until he has ten acres under water. Carp find a ready sale in the San Francisco markets, and elsewhere, at comparatively high prices, and we prophesy that Mr. Duncan's enterprise will meet with flattering success.—*Visalia Delta*

#### F. A. HATCH & CO.,

(Merchants S. F. Produce Exchange.)

#### COMMISSION MERCHANTS,

122 CLAY ST., SAN FRANCISCO.

Flour, Grain, Wool, Beans, Dried Fruit, Honey, Etc.

LIBERAL ADVANCES MADE ON CONSIGNMENTS.

—AGENTS FOR—

Healdsburg X X X Flour

—AND—

UNION MILL FLOUR.

#### BUTLER TUBULAR IRON FENCE POSTS.



#### IRON RANCH FENCE.

The Best Ranch, Farm and Vineyard Fence now in the Market. It is built with Iron Posts and Barbed Wire, the Posts being made of Wrought and Cast Iron. The top of the Post is made of thick galvanized, and pierced with holes, through which a plain wire is inserted, which fastens the barbed wire to the Post. The Post is cast with three flanges, each 22 inches long, and its entire length is six feet. The flanges render the Post immovable when inserted in any soil. These Posts are placed two rods apart, with an iron stay between, and there can be any number of stays, and any kind of wire used. Three men can build, in good ground, one mile of fence per day.

FIRE CAN NOT BURN OR INJURE IT; FLOODS CAN NOT WASH IT AWAY; STORMS CAN NOT MOVE IT.

I sell Fence, loaded on the coast at San Francisco or St. Louis (Missouri), at \$1.50 per rod, for three-rail fence, and \$1.25 for five-rail fence, all complete, and to Agents at Reduced Prices, which enables a good, live man to make from \$500 to \$1,000 per month, with an investment of small capital. The entire State of California is now sold to Agents, who are located in nearly every county, and are now selling hundreds of miles of Fence. I own the right to all the States and Territories, excepting Arkansas, Texas, California, Kansas, Nebraska, Missouri, Colorado and Utah. The name of the Post is the BUTLER TUBULAR. The merits of the Fence has been tested for five years in all kinds of soil and climate, and I have yet to meet the man or woman who does not say: "What is the Post?" State or Territory can be had by writing to the Manufacturer and Proprietor,

M. D. REED, - - No. 506 O'Farrell Street, San Francisco, Cal.

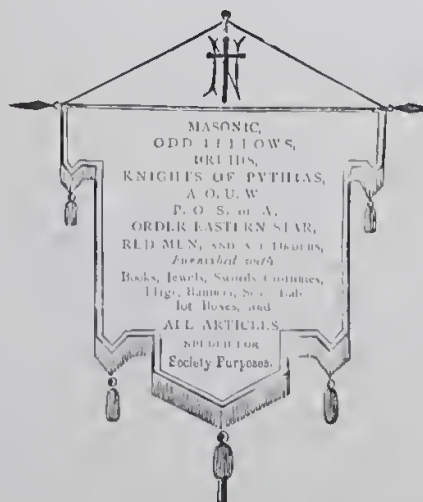
Established by Daniel Norcross in 1849.

#### NORCROSS & CO.,

MANUFACTURERS AND IMPORTERS OF

REGALIA, PARAPHERNALIA, ETC.

MILITARY GOODS, FLAGS AND BANNERS.



KNIGHTS TEMPLAR COSTUMES A SPECIALTY.

NO. 6 POST STREET, Masonic Temple, San Francisco.



## CLOVERDALE AND ITS SURROUNDINGS.

We take the following extracts from a letter by J. B. Armstrong, formerly editor of the *Santa Rosa Republic*, to the *Rural Press*:

Cloverdale is a beautiful little town containing about 800 people. It is situated on the road from San Francisco to the Geysers at the north end of the railway, in Sonoma county, and is probably better known to tourists than any village in California. The neatness of its improvements, and the picturesque beauty of its surrounding scenery are unequalled in the State. Grape-growing is looming up as so to overshadow most of the industries here. A great many acres have been planted recently to new vines, and vineyard lands on the slopes have doubled in market value.

The valley of Russian river is the best in the State for growing Indian corn. The soil is generally a moist, sandy loam. It is also eminently well adapted to the raising of hops, of which large quantities are produced, especially at Hopland and Healdsburg. On the margin of the bottom and ascending the slopes of the foothills, are vineyards, some in full bearing, and many newly planted. There are rocky peaks and inaccessible declivities far above the river, but most of the land is fit for grazing, and some of it lying in nooks a thousand feet above produces fruit and grain. There are many cosy homes perched up among the clouds, so far away they look like white specks no larger than a pin's head. The immense mountain grant called Caslamayomi, containing about 27,000 acres, is a dozen miles in length from a point opposite Litter Springs near Cloverdale. It lies on the east side of the river at an average distance of say half a mile, being bounded on the north by Sulphur creek, following its windings nearly to the Geysers. Its eastern limit is a direct line running thence, southerly, through the lofty Geyser peak to Sausal creek, where that stream enters the river bottom. All over this grant a large portion of which is accessible, there are settlers and improved ranches, with orchards and vineyards. Its average elevation may be from 1,200 to 1,500 feet. The surface is an undulating plateau, broken here and there with water courses and steep canyons. There is plenty of grass and timber, and, in many places, fine adobe and other soils. The whole country shows traces of volcanic origin—its rocks and patches of red soil, famous here, as elsewhere, for vine-growing.

The history of this flourishing grant is a checkered one. Until a few years ago, the owners, who purchased it in early times for a trifle, were engaged in a pious war with their neighbors about its location. Big as it is, the grant was shored around to make room for older claims, until finally the proper authorities confirmed the title to its present boundaries. In the meantime, settlers swarmed on it, where some have resided as long as 25 years. They at first hoped, perhaps, that the land would be declared public domain when the question was settled, and they, then, would be in shape to pre-empt and homestead. But it was only a dream. The proprietors of the grant recently acquired a good title, and offered the settlers the whole of it (more in extent than a township) for \$80,000—about three dollars an acre. The proposition was accepted, and the land will be divided *pro rata*, among the settlers.

Attention is made to this tract because it is a bit of local history, and for the further reason that it shows what may be done with low-priced mountain lands in the Coast Range, where there is plenty of moisture, with grass and a fair proportion of tillable land, and a climate genial enough for growing every product raised on this coast. The acts of the settlers show what may be done by the agents of the State Immigration Association in other localities, emphasizing, more particularly, the value set on this class of land by cool-headed occupants. The market value of the river bottom land is at least ten times as much in a natural state. Its productiveness is not in the same proportion, nor anything like it. The outside limit the writer would assign to it as a basis for comparison, for mixed farming, fruit-growing, grazing, etc., including waste land, would be as one is to five. Consequently the settlers have purchased their grant for about half its true value.

There are good schools, churches, hotels, a public library, with water-works and other means of irrigation, such as beer shops and the like, and a water grid until that runs all the year round at Cloverdale. The outlook for healthy sports is first-rate. The river and several clear streams are near at hand, filled with trout. City sportsmen may, and we believe often do, get lost when hunting in the mountains. Numerous healing springs lie beyond, towards Clear Lake, over a smooth road lined with elm, bold scenery. And last, though not least, San Francisco can be reached and returned the same day a very desirable convenience for families sojourning here.

## AN ATTRACTIVE RANCH.

The Livermore *Herald* thus describes a place near Livermore, Alameda county, that is destined to be come notable some day:

Charles A. Wetmore, Executive Officer of the State Viticultural Commission, is making, on his Ojo del Monte ranch, at the narrows on the Arroyo Valle, four miles south of Livermore, a series of most notable improvements, both practical and ornamental. The ranch proper is a little valley completely surrounded by hills, with the exception of a wild, narrow pass, scarcely 200 feet in width, through which it is reached from the outside world. In this valley, there is found nearly every possible variety of soil, from a disintegrated limestone to the heaviest adobe, and all the various slopes of hill and dale which an enthusiastic viticulturist could possibly wish. In the distribution of his vines and fruit and nut-bearing orchards, Mr. Wetmore has shown a thorough knowledge of their various requirements and needs. His orchards of chestnut and filbert trees are planted on moist northeast slopes, such as are partially favor-

rows of rapid growing ornamental trees, which are to be protected by a barbed wire fence, and are so located as to add to the effect of a grand curving drive into the narrows, and at the same time complete a natural screen for an alder-begirted deep hole in the creek, which Mr. Wetmore intends for a public bath. It is his intention, to the near future, to erect a first-class place of refreshment, and a bath-house at this point. His ranch is at this time well worth a visit.

## IMMIGRATION TO CALIFORNIA.

At the present rate of immigration the next census will show that California has taken an immense stride forward in point of population. For some time the daily arrivals of immigrants have averaged in the neighborhood of one hundred, the larger portion being males or heads of families, coming with the intention of settling somewhere within the fertile valleys and productive hills of the State, and bringing an immense capital of muscle and energy and, in many cases, a considerable amount of wealth.

## CALIFORNIA FRUITS.

As to the statements sometimes made by correspondents of eastern journals that fruit-growing in this State has been overdone and is likely to bring cultivators to grief, a writer in the agricultural department of the *Weekly Bulletin*, of this city, answered recently, in a satisfactory, that we publish what he says on the subject:

There is no more prospect of fruit culture being overdone in California than there is that butter and cheese making and wool growing will be overdone, and yet the prediction that the latter industries would be overdone long, has been made many times, and as often as made the facts have disproved the theory. Whoever goes about fruit culture in a blind, haphazard sort of a way, may find in his individual experience that the business is overdone. That was found out more than twenty years ago. It was found out later when much poor fruit was dumped into the bay. There is no more danger of overdoing the wine business in California than there is in France. By this we mean intelligent and skillful viticulture. By no other means have so large values been taken from the ground per acre during the past five years, as by fruit-growing. Individual failure here and there means nothing more than that the individual had made a mistake as to the kinds of fruit he was growing, or in the methods of cultivation. Such mistakes pertain to all departments of agriculture.

There was a market last year at remunerative prices for every pound of Bartlett and Wint r Nells merchantable pears, every pound of the better sorts of plums and apricots, every pound of cherries, and every box of good apples grown in the State. There was a market also for all good wine and table grapes at prices which paid the producer a handsome profit. Prices for running fruit were somewhat lower than the year before, but it was noted that many who gambled a little at low prices, went right on putting out new orchards, thus giving certain evidence that the business on the whole had been very satisfactory. Indeed, since the last crop of fruit in this State was gathered and marketed, the most extensive preparations for new orchards and vineyards were made that were ever known in California. In a few instances the planting area was abridged somewhat by the drought in midwinter. But the late rains made it certain that vineyard and orchard planting would not be retarded this year with more than the usual contingencies. Were this business overdone, how does it happen that men who have been long in the industry are doubling the area which they formerly devoted to fruit? There may have been some extravagant statements about the profit of fruit culture in this State, which no more represent the average results than the New York Sun's item of fruit land held at \$1,000 an acre, or that fruit cultivators were likely to come to grief. What is still true, and has been true, is that for the greatest variety of profitable fruit culture, California offers greater inducements than any other State in the Union.

## DIVERSIFIED FARMING.

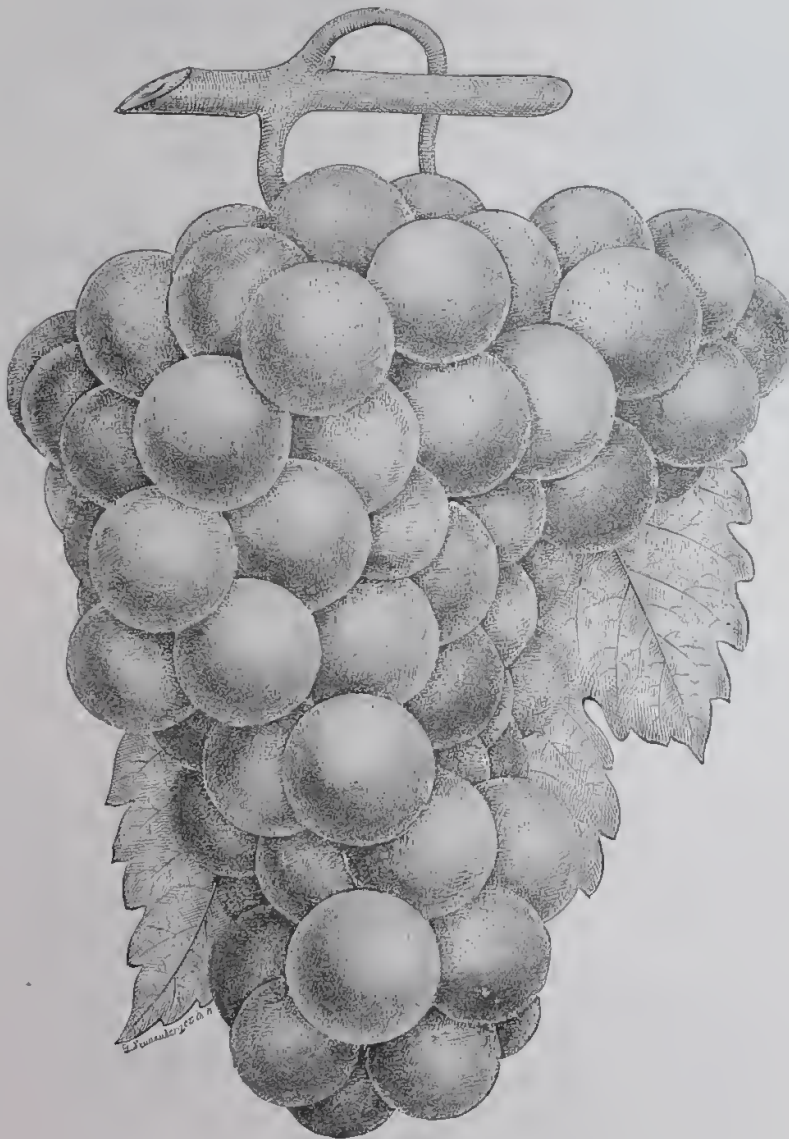
The following, from the Greenville, Miss., *Times*, contains some excellent suggestions, that may interest California farmers:

A little more than a generation ago the chief wheat producing region of the Union was portions of New York, Pennsylvania and Ohio. The whole of farming there consisted to growing big wheat crops. All the farm was wheat. In time the rich prairie of Indiana, Illinois, Iowa, and Missouri were settled and brought under cultivation. The new lands there far exceeded those of other States in fertility, and the price of wheat went down below the cost of production; just as cotton has done here. Lands sold to \$5 and \$10 per acre and those who could sell, moved west. But, as with us, few could sell, and the situation had to be met. Diversified farming, grazing, the dairy and the poultry yard took the place of wheat. Lands again appreciated far beyond their original values, and a rising prosperity was established. In time the then new lands were outstripped in wheat growing by the vast and fertile prairies of Dakota, Kansas and Nebraska, and the rich valleys of Oregon and California, and they also changed the stock raising and diversified farming. The building of railroads has so extended and cheapened transportation that all they can produce finds a ready and remunerative market.

## A VALUABLE FOREST.

A correspondent of the *Lumberman's Gazette* says:

In Humboldt county, California, the whole area of the redwoods forest has been mapped and plotted. There are something over 300,000 acres of this timber in that county alone. Disinterested experts estimate 100,000 feet of lumber per acre an average if not a small yield. At \$15 per 1,000 feet the annual yield of Humboldt county alone would just about pay the present national debt.



THE POCKLINGTON GRAPE—A New and Famous Eastern Variety.

able to the growth of the huckeye (which is a chestnut) and the hazel (to which family the filbert belongs); of olive, on a bench of light, dry soil, north of the creek; of fig and peach, on a lower bench of moist sedimentary soil, further east; of vines, on different exposures, according to variety; and of pear, in warm pockets of deep rich soil. Of each of these above named trees, he has orchards varying in extent from two or three to fifteen or twenty acres, some of this and some of last season's planting. The olive orchard planted a year ago, is well worth a visit. But a small percentage of the trees were lost, the balance making a vigorous growth, and clearly demonstrating the peculiar fitness of this fruit for cultivation upon our light, dry soils. Mr. Wetmore's place, taken as a whole, is one of the most naturally beautiful spots in this county, and he is with lavish hand building the aid of art in nature. In the natural gaps opening to the plain, in itself one of the prettiest bits of mountain scenery in the entire Coast Range, he is digging deep trenches, and replacing the gravel and rock taken therefrom, with good earth. In this imported soil are being planted

It is also stated that the railroad company are very desirous of settling up the unoccupied lands of the State, and to that end are sending out agents to induce further a larger portion of the human tide that is settling westward from Europe and the Atlantic States. These agents are to work in a systematic manner, and with in most cases forward no settlers until places are provided for them. Governor Stanford's immense ranch is to receive its share of the coming settlers, a large number of vine-dressers being expected there from the shores of the Mediterranean. The olive also is to be cultivated on a large scale, and the olive groves of Italy will send their quota of skill and experience to further the development of this industry. The aimless manner in which immigration has hitherto tended toward California is at an end, and a systematic plan adopted similar to that in use by Kansas, Nebraska, Minnesota and other Western States. The railroad company have no desire to add to the idle population, as their revenues are derived from actual producing settlers; and their vast unoccupied tracts of land are awaiting a population that will add to the carrying trade. —*Napa Register*.



# SAN LORENZO VALLEY, SANTA CRUZ COUNTY.

What is said in the following article, taken from the Santa Cruz Sentinel, will apply to many other sections of our State:

There is no portion of our county which has added so much to our general wealth and prosperity within the past few years as the San Lorenzo valley. The industries of this section are in the main the manufacture of lumber and the production of railroad ties, telegraph poles, shingles, shakes, barrel staves, etc. Those grand old mountains lying to the north of, and in sight of us, which, but a few years ago, were deemed comparatively useless and almost inaccessible, are to-day spanned by numerous well-built wagon roads, dotted with the cabins of the hardy woodsman, and made to yield their prodigious bulks of redwood trees, giving employment to an army of strong-muscled men, and added their great wealth to our county and State. Already these mountain regions, now partly denuded of their forest monarchs, are sought for and selected as the habitation of man, and with their selection, occupation, and habitation, spring into being the orchard, the vineyard, and the small farm, with their cosy cottages beside some cosy spring or rivulet, whose waters never cease to flow, but are forever continuous in their bright and sparkling wealth. As the axeman and ox-team advance, and the trees upon the mountain-sides and heights are felled, and their products conveyed to market, the husbandman, the viticulturist, and the orchardist keep pace with the felling process, and in a few moves, though there may be less timber and forest lands, yet as they disappear there will be a greater population, more homes, more substantial improvement and wealth. Much of the growth and advancement of this mountain region will depend upon the facilities for travel. Without roads locomotion is physically impossible for those who wish to there live and thrive.

## SMALL TRACTS OF LAND.

As public attention is called, at present, to the possibilities of small tracts of land, we publish the following from the Yolo Mail:

At present prices land is not regarded as a good investment for wheat growing. Therefore any experience from small pieces of land is interesting. J. Y. Dillon yesterday gave us the result of his experiment upon ten acres of land. He began upon it six years ago by planting five acres to the Muscadine grape. He now has seven acres; the last two being lately planted. He also has one acre planted to pines, nectarines, and peaches. From his five acres, last year, his gross returns were \$1,200. He planted last year three-quarters of an acre to beets, which yielded him 35 tons. With these and a little turn or shorts he kept a span of horses and two cows seven months, besides which he sold \$30 worth of beets. One of his cows yields him now from ten to eleven pounds of butter per week, besides the milk the family (consisting of his wife and one child) uses. When the cow is fresh he makes from her fourteen pounds of butter per week. Along his fence he planted twenty walnut trees, not six years old, which have borne fruit the last two years. From the wood cut from these trees this year in the trimmings he made little over three cords of stove wood. Gum trees planted six years ago, and some of them twelve inches in diameter, will make, when cut into wood, from one-quarter to one-half a cord of wood per tree. Mr. D. says in the condition in which he now has his fruits and vines, he can make a living for himself and family, and lay by from \$8,000 to \$10,000 annually.

## A GROWING TOWN.

It may not be thought wise to say anything calculated to inflate the price of real estate in Los Angeles county; it is perhaps selling for all it is worth now, but the possibilities of the future are almost beyond description. Our genial and health-giving climate will continue, more and more, to attract hither from all parts of the world those who seek, and are able and willing to pay for, homes in this land of sunshine, fruit and flowers. As new homes are built and beautified, the country will become from year to year more attractive, and the fame of our land and its attractions will become more extended, until the whole valley, from the mountains to the sea, will be crowded in every available spot with such luxuriant homes as refined taste, with abundant means, can plan and build in a land so favored in soil and climate as this.—Los Angeles Herald.

## OVERDOING THE BUSINESS.

L. J. Rose, a well-known grupe-grower of Southern California, reports to the State Viticultural Association that his observation convinces him that Californians are going into the wine-grape business too largely; that the product of wine grapes is certain to exceed the demand, and the result must be disastrous. There can be no doubt of the correctness of Mr. Rose's statement; this doubling the vineyards each year is unwise.—Record-Union.

There are several points to be considered before accepting the conclusion of Mr. Rose or the endorsement of the above-named paper.

1st. The planting of vines will be divided between the wine and raisin variety, thus retarding, at least, the time when the business of growing the wine grape will be overdone.

2d. The phylloxera is rapidly destroying the vines of Europe, thereby greatly diminishing the supply from that source.

3d. The market for California wines is expanding as fast as the growing of the grape.

4th. There is a margin for a considerable fall in the price of wines, and still leave grape-growing a remunerative business. And by cheapening wines they will be more extensively used. At present the use of wines is comparatively limited in the United States. The people of the United States are, as yet, not a wine-drinking people; but they will gradually become so, when wines have become more generally known.

5th. When the area to which vine-growing can be devoted on this coast is compared with the vast territory of the world, it will be found to be comparatively small. Other sections, it is true, will compete to some extent, but the wines of California can be brought up to such a quality as to practically place our products, in a great measure, above competition, and a market can always be found.—Los Angeles Express.

## THINKS HE HAS FOUND IT.

A man writing from Colfax expresses the opinion that he has found the "mother lode" of California. He says: The Big Vein mine, which was bonded last week by Wm. Werry, is situated about three miles in a southeasterly direction from Colfax. As the vein upon which this mine is located runs in a southeasterly and northwesterly direction, throughout the entire length of the State, it is without a doubt the mother lode of California on the backbone and dividing line between the different geological and metaliferous formations extending along the western slope of the Sierras. For a distance of 75 miles along the vein, or from the vicinity of Quincy, Plumas county, to Mormon Bar, on the middle fork of the American river, in El Dorado county, the writer has made a careful examination and finds that most of the creeks and gulches along the course of the vein have been rich. There are many mines located at different points along this vein, some of which have been and are to-day rich mines. The famous Amador mine of Amador county and the Banner Hill of Nevada City are two of the many mines that are situated on the mother lode. The ledges in the Big Vein mine consist of two different parts, each of which is from ten to twenty feet in thickness, divided by a vein of clay and serpentine of about ten feet in width, and all running parallel to each other, with a dip to the east of about 45 degs. The vein next to the footwall is composed of gray quartz and metallic slate, which assays from \$10 to \$100 per ton. This is strictly a "fine gold vein," as the gold is almost pure, and is distributed in fine particles all through the rock from wall to wall. The vein next to the hanging wall is of talcose slate, heavily charged with sulphurets of iron and steel sulphurets carrying considerable gold and silver.—Nevada Transcript.

## GROWING ALFALFA.

A writer in the Sacramento Record-Union states that a gentleman residing in San Joaquin county lately purchased twelve acres of bottom land, paying therefor the sum of \$200 per acre. When questioned as to the profits he expected to receive on the investment, having planted the land to alfalfa, he replied that from the several cuttings he expected to get not less than four tons per acre, and that it was surely safe to value the hay at six dollars a ton (now worth about \$16). Thus the alfalfa would pay twelve per cent. a year, at \$200 an acre for the land. The pasturage would pay harvesting expenses, leaving the hay crop net.

## BUILD UP THE TOWN.

The following sensible suggestion we clip from the Petaluma Land Journal: People from abroad are constantly coming among us. Let us treat them well and welcome them. If the particular piece of property we want to sell them does not suit them, refer them to our neighbor, who has property. Let us not, any of us, set the dog in the manger, but let us be big-minded, liberal-hearted, and welcome the very desirable class of people who are coming among us, to hospitable homes. There is room enough for us all, while this generation lasts. And while we live and our lots are cast in such pleasant places, let us evince a disposition to share it with our fellow mortals. There is enough here for us all, and to the stranger who may sit to our board.



OPPOSITE UNION SQUARE

THE LEADING

Commercial School

ON THE COAST.

LIFE SCHOLARSHIPS

—FOR—

Business Course. Only \$70.

NO VACATIONS.

Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Healthful Location.  
Ladies Admitted.

Special Inducements Offered to Persons of Neglected Education.

Business Course.  
Academic Course.  
Combined Course.  
Penmanship Course.  
Modern Languages.  
Phonographic Course.  
Special Branches.

For Further Information call at the College Office

No. 320 POST ST.,

Or Address the Proprietors,

CHAMBERLAIN & ROBINSON.

J. D. SPRECKELS & BROS.,

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS.

325 Market Street,

SAN FRANCISCO.

CALIFORNIA SUGAR REFINERY,

Manufacturers of the

STANDARD SYRUP,

A SUPERIOR ARTICLE,

Put up in Barrels Expressly for Home Consumption,

ALSO,

EXTRA HEAVY SYRUP,

In Barrels for Export.

REFINED SUGARS,

At Lowest Market Rates.

Office 325 Market Street, Up Stairs.

# PACIFIC COAST LAND BUREAU, A CORPORATION.

President.....WENDELL EASTON,  
Vice-Pres. and Gen. Mgr.....GEO. W. HARR,  
Treasurer.....ANGLO-CALIFORNIAN BANK,  
Secretary.....F. E. WIDGER.

Board of Directors:

J. O. ELDRIDGE, GRANT I. TAGGART,  
G. W. FIDLER, F. H. WIDGER,  
WENDELL EASTON.

W. P. HABER, Correspondent, Fresno.

EASTON & ELDRIDGE, Auctioneers,

PRINCIPAL PLACE OF BUSINESS:

22 Montgomery St., San Francisco.

AGENT FOR SALE OF LANDS OF THE CENTRAL PACIFIC AND SOUTHERN PACIFIC RAILROADS.

Sub Agencies at each County Seat of the State.

LIBERAL CREDIT SALE

—OF—

CHOICE VINEYARD

—AND—

FRUIT AND ALFALFA LANDS

Within eight miles of the flourishing Town of

FRESNO,

And on Main Irrigation Canals.

SATURDAY, JUNE 10, 1883.

At 2 o'clock P. M., At

FRESNO CITY HALL.

Fresno City, Fresno County, Cal.

WE WILL SELL AT AUCTION ON LIBERAL CREDIT

Nine Sections of the Choicest Vine.

Fruit and Alfalfa Land in the State,

ADAPTED TO VINEYARDS, ALFALFA AND GENERAL FARMING.

Within nine hours of San Francisco, and possessing one of the most healthful and delightful climates in the world.

MOST LIBERAL TERMS. TITLE PERFECT. One-fourth cash, balance in one, two and three years interest, eight per cent. per annum. Twenty days allowed for search of title. A deposit of ten per cent will be required on the fall of the hammer, balance of cash payment on delivery of deed, and if not so paid (unless for defect of title), then said ten per cent to be forfeited and the sale to be void. Instruments of sale at purchaser's expense.

All of sections 28, 30, 32 and 34, in township 15 south, range 19 east, Mount Diablo meridian. Also, all of sections 2, 4 and 6, in Township 16 south, range 19 east. Also, sections 25 and 31, township 15 south, range 20 east.

The land is level, slightly inclining towards the west; free from brush, alkali, and other impediments. The soil is a rich sandy loam, of great fertility, and will stand free irrigation without baking.

The climate is as fine and healthy as can be found in the world—no feverish agues or other malarious diseases. For throat or lung complaints, the dry air of this section always relieves and often cures. For invalids seeking health—the merchant, mechanic or professional man, who is tired of the constant strain and drudgery of city life—this country offers a haven of rest. Here is every element necessary for the establishment of attractive, enjoyable and profitable homes.

The SYSTEM OF IRRIGATION is such that each owner of land will be able to take water from a main canal on his own land.

WATER has been running on to part of his land during the past five years, and on any part of the tract water can be found within twelve feet of the surface, making it valuable for the planting of alfalfa.

OPEN LETTER FROM THE FRESNO CANAL AND IRRIGATION COMPANY.

SAN FRANCISCO, May 1, 1883.

GENTLEMEN: In view of the proposed sale of lands comprised in Sections 28, 30, 32 and 34, in T. 15 S., Range 19 E., also, Sections 2, 4 and 6, in T. 16 S., R. 19 E.; also, Sections 25 and 31, T. 15 S., R. 20 E.—being parcels of land in Fresno County, California—we will issue to such land as the county offers a haven of rest. Here is every element necessary for the establishment of attractive, enjoyable and profitable homes. The SYSTEM OF IRRIGATION is such that each owner of land will be able to take water from a main canal on his own land. WATER has been running on to part of his land during the past five years, and on any part of the tract water can be found within twelve feet of the surface, making it valuable for the planting of alfalfa. OPEN LETTER FROM THE FRESNO CANAL AND IRRIGATION COMPANY.

M. J. CHURCH,

President Fresno Canal and Irrigation Company.

—ALSO—

THE WASHINGTON COLONY CHEESE FACTORY,

With Lpt. No. 38, containing 20 acres.

CHOICEST LAND IN FRESNO COUNTY.

This property all lies South and West of Fresno, and on the line of the main Canal of the Fresno Canal and Irrigation Co., and within 8 miles of Fowler Station. We will offer the land in entire Sections, Half and quarter sections, and either 10 or 20 parcels to suit buyers. THE WASHINGTON COLONY CHEESE FACTORY is a substantial Adobe Building, constructed three years ago, for the purposes of Cheese-making, and built by the work. Situated on a solid brick foundation, the walls of adobe, with walls one and one-half feet thick, air chamber and shake roof above—regulates the temperature all seasons of the year. This building is well suited to factory purposes, or would make a fine wine cellar or fruit dryer or cannery, which are necessities in the vicinity.

SMALL COTTAGE AND OUTBUILDING. The land includes 20 acres of land, with a full water right paid up.

## EXCURSION TRAINS!

On Friday, July 15th Excursion Trains will leave San Francisco at 11:30 A. M. and 4 P. M. for Fresno City. Tickets for the Excursion will be on sale at San Francisco, Oakland, Stockton, Sacramento, Lathrop and office of Pacific Coast Land Bureau, San Francisco.

TICKETS FOR THE ROUND TRIP \$7.00.

NOTE.—Excursion Tickets will remain good for nine days. First-class Accommodation can be secured at Fresno by thirty miles to W. P. HABER, Fresno, or PACIFIC COAST LAND BUREAU, San Francisco.

For further details, catalogues, maps, circulars, reports and letters from resident farmers and vineyardists, and all further information apply to the

PACIFIC COAST LAND BUREAU,

22 Montgomery St., San Francisco.

W. P. HABER, Fresno.

EASTON & ELDRIDGE, Auctioneers.



## HYDRAULIC MINING.

Taliesion Evans, an eastern writer, who recently visited California, reviews this great industry in the *Century Magazine*. We quote the following:

A hydraulic mine is simply an open cut of huge dimensions excavated in the huge gravel deposits. Sometimes this is accomplished without difficulty from the side of the canon forming the bed of the modern stream, or through the agency of a conveniently situated ravine. But, in many cases, the rim-rock of the ancient river-bed intervenes between the antiferrous canno which the hydraulic miner chooses to use as a "dump" or depository for the "tailings" or debris of his sluices. To reach the deepest place to the dead river-channel, long tunnels are frequently necessary. The North Bloomfield Mining Company, for instance, in one part of the claim, had to bore a tunnel eight thousand feet in length before the bottom of the antiferrous gravel deposit was drained, and a branch tunnel nine hundred feet farther before another part of the company's ground was so drained that it could be effectually worked by the hydraulic process. The original tunnel and its three air shafts cost the company two million dollars; the branch tunnel was proportionately costly. All the water used in the mine, and all the material removed, passes through this tunnel into the canon of the South Fork of the Yuba. Such a hydraulic mine looks like an enormous basin hollowed out of the mountain side. Many of the principal hydraulic mines on "The Yuba Ridge" are of this order.

The character of the gravel formation is shown to great advantage in a hydraulic mine. The upper stratum, for a depth of one hundred feet or so, is loose and friable, and of a rusty color, which is caused, no doubt, by the oxidation of iron pyrites, of which the lower stratification is full. The process of oxidation is no doubt facilitated by the percolation of surface-water through the gravel. The lower stratum of gravel is denser, well cemented, coarser, and of a bluish color. Owing to this latter feature it is called by miners "blue gravel," and, because of the greater portion of gold found in it, the term "pay dirt" is also applied to it. Occasionally a stratum of pine-clay will intrude between the upper and lower strata of gravel, and a layer of gravel varying in thickness almost invariably overlies everything. The gravel deposit is rich in vegetable fossils and petrifications. Trunks of sugar-pine, manzanita, and other forest trees and shrubbery, converted into solid stone, are abundant. Fossil leaves and ferns are plentiful in the pine-clay, and the footprints of birds are numerous in the same formation. Here, then, are evidences of vegetable growth during the formation of these deep places, which is identical with, and quite as rank as, that which now exists. Who shall interpret the testimony of the deep placers of California? The great openings formed to them by the hydraulic miner furnish the enterprising and intelligent geologist a rare opportunity, which, thus far, has been almost entirely neglected. The only attempt worthy of mention is that of Professor J. D. Whitney's monograph of the deep placers of California, published at Cambridge, Mass. One thing is, however, certain: It was after the great lava flow which overran the State of Oregon and Northern California that the present water-courses were carved out, not only carrying off, in the course of erosion, the lava-cap and gravel deposits, but also grinding down the country rock, in some places, two thousand feet deeper than the beds of the dead rivers.

The mode of working a hydraulic mine is very simple. From the distributing-reservoir—a large artificial lake in the vicinity of the mine, but situated at a much higher elevation—the water is conveyed in ditches and long iron pipes, fifteen, twenty-two, or thirty inches, in diameter, to the monitors. The gravel removed by the stream is led through the ground sluices into the deep open cuts that have been excavated with powder and pick in the solid bed-rock. These open cuts are from fifteen to forty feet (and sometimes even more) in depth, and from four to six feet in width. They discharge into the tunnel excavated through the rim rock, and the debris is then delivered to a system of sluices and "under-currents," by which it is expelled at "the dump."

## IMMIGRATION.

The Mountain View Immigration Society has been organized by colored residents of Stockton. The society has for its object the bringing of negroes from the Southern States to the Pacific Coast. The men are for farm laborers and the women for house servants.

## Yosemite Falls.

The *New York Times* copies from the *Cornhill Magazine* the following description of Yosemite Falls:

The width of the stream at the summit is about 20 to 30 feet, but at the base of the upper fall it has expanded to a width of fully 300 feet; and, as the wind carries it to one side or the other, it plays over a space of about a thousand feet in width of a precipitous rock-face, 1,600 feet in depth. This is the height of the upper fall. As seen from below, the Yosemite, though divided into three distinct falls, is apparently all on one plane. It is only when you reach some point from which you see it sideways that you realize that the great upper fall lies fully a quarter of a mile further back than the middle and lower falls, and that it rushes down this space in boiling cascades till it reaches a perpendicular rock, over which it leaps about 600 feet, and then gives a third and final plunge of about 500 feet, making up a total of little under 2,700. Now,

## WILL IT SPREAD?

Isaac DeTurk, one of the State Vincentural Commissioners, says there are two ways by which the phylloxera, the grape-vine pest, is transported from one section of the country to another. One is by the wind when the insect is in its winged form, and the other is by transplanting rooted vines taken from an infected district. So far as he knows there is no phylloxera this side of Glenn Ellen, in the Grillecos Valley, and there is no probability that it will reach further north by the former way, as the prevailing winds to this section and north of here are from the north west. He said further that the peculiar topography of the country round and about Glenn Ellen had an effect upon winds coming from the south, and that when they struck Sonoma mountain they would whirl about and form an eddy, and deposit the insect in that section. He thought that those who are planting young vineyards, or who contemplate going into the business north of us, should be careful and not put out

## THE VALLEYS OF THE FOOTHILLS.

It is gratifying that the valleys of the foothill counties of the State are coming to be appreciated. It is indisputable that the counties verging on the Sierra are among the most productive regions of California. With the aid of sidehill plows, their slopes can be utilized for raising grain, while for orchards and vineyards no better location can be found on the globe. The foothill counties are destined to play an important part in the future prosperity of California. By their mineral wealth they gave California its star as the most prosperous State in the Union. By their agricultural development they will find homes and a means of support for a happy, thriving community. There is scarce an acre in the innumerable valleys of the whole foothill region from Shasta to Kern that is not susceptible of the highest cultivation. It is becoming a twice told tale to say that in them are found the home of the grape, semi-tropical and temperate zone fruits. But it is a story that will run oft repeating, until the millions of acres now occupied with chaparral and shrub-forestry are blossoming, at this season, with fruit.

The foothill region is one specially attractive to immigrants and persons with small means. It is the only part of the State where Government lands can yet be secured. In all parts and sections of the foothill land can be purchased at moderate rates. The many mining camps scattered up and down insure a home market for all the produce that can be raised. There is about everything in the foothills which can tend to make life comfortable. The climate is salubrious. The occasional cold snaps in the winter only make the charming spring more enjoyable. Game everywhere abounds. The mountain streams in the seasons are filled with trout and other fish. The soil is productive. Droughts are unknown, and if in any year the rainfall is short there is abundance of water from the melting snows in the mountains for irrigation.

The picture as above delineated is not overdrawn. The foothill farmers of California are among the most prosperous to the world. Let any person examine the homes and surroundings of the farmers of Nevada, Amador, El Dorado, Placer and a half dozen other counties, and his observations will more than justify the statements made in this article. The only complaint it is possible for the foothill farmers to make is that they are somewhat distant from the large cities. But the country is dotted with schoolhouses and churches. It will not be long, also, before narrow gauge railroads are penetrating into all the foothill counties, bringing the people within twelve hours of San Francisco. The foothill farmer has further exceptional advantages over his brethren of the valleys in his facilities for stock-raising. He has untold acres in the mountains upon which he can herd his stock in the summer months, and he can without difficulty get enough hay to feed his cattle and sheep in the winter. There is no man who has settled in the foothills and tried honest hard work who has not succeeded.—*Cor. San Francisco Post.*

## VINEYARD NOTES.

The *Livermore Herald* says: The growth shows, this Spring, in all the vineyards of last year's planting, in this vicinity, is as once surprising and gratifying. During the past three weeks, the young shoots have pushed out, from more buds, to from a few inches to a foot or more in length, and the appearance in the larger fields is most beautiful. The thorough hold in the ground which the cuttings obtained last year, as evidenced by the monster roots they exhibit, when dug up, is now beginning to show its effect, in a vigor of growth seldom attained except in old vines. In the depth of our soil, and its freedom from bed-rock, making possible a deep root, with innumerable lateral feelers, has the secret of this growth, auxiliary causes being also found in the looseness and warmth of our soil, freedom from harmful frosts, and the thorough cultivation and care received by our vineyards. A rule through our several vine districts at the present time, will be rewarded with both pleasure and profit.

## SONOMA COUNTY'S CROP.

We have seen and conversed with a number of farmers during this week, and they all spoke of cheering terms of the crop prospects this year. Though the growing wheat has been injured in a number of places by the late, heavy rains, it will not be materially injured, but it may be injured with rust a little. Sonoma county has never seen a better year.—*Petaluma Courier.*

Subscribe for this Resources of California.



SITKA, ALASKA TERRITORY.



A VIEW OF THE BAY OF SITKA.

if you can realize that the height of Niagara is 162 feet, you will perceive that if some potent magician could bring it into the valley it would be effectually concealed by trees of fully its own height, many far overtopping it. Niagara, of course, makes up in width what it lacks in height. The Horseshoe or Canadian Fall is about 150 feet. The width is 2,100 feet. The American Fall is about 160 feet in height and 1,100 in width. The total width, inclusive of Goat Island, is 4,200 feet.

## POULTRY RAISING.

One of our prominent and successful ranchers has furnished us with the result of his efforts in keeping thoroughbred poultry. From thirty-five hens of the brown and white Leghorn variety he obtained, from January 22nd to February 6th, 395 eggs, and the hens are still laying as vigorous as ever. It pays to keep the very best of poultry and live stock, as well as the best of wheat, and many of our farmers would be surprised to see what a good table can be set by the profits of keeping blooded poultry.—*Grainly Herald.*

rooted vines from infected districts; and that if the insect ever obtains a foothold in Cloverdale in any section lying in the tract of the northwest winds, it would, in the course of time, overrun every valley in Sonoma county. Mr. DeTurk is a practical, painstaking and observing man. He has made the phylloxera a study for years, and his ideas regarding the probability of its further spread in this county are necessarily deduced from well established premises. He suggests a very effective remedy, and to our notion the only one that can possibly prove successful: The insects move in colonies, and when they first attack a vineyard, they are first observed in spots here and there; the remedy is to pull out all the vines thus affected, and a few others near by, and pile them over the place or take from whence the infected vines are taken, and having added kindling and other combustible material, set fire to them, thus heating the ground and killing the insect and destroying the brues, if perchance there may be any under the bark.—*Santa Rosa Republican.*



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 340 Sansone St., Hallock Building.

ISSUED MONTHLY

Terms .....\$2 per Annum.

SAN FRANCISCO.....JUNE, 1883

## READ AND CIRCULATE.

When you have read this paper, preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and will be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

First Page.—San Joaquin Valley.  
 Second Page.—San Joaquin Valley, continued.  
 Third Page.—San Joaquin Valley, continued.  
 Fourth Page.—San Joaquin Valley, continued.—The Quality of Wines.—Valuable Interest Rules.—Carp Raising.  
 Fifth Page.—Cloverdale and its Surroundings.—An Attractive Ranch.—Valuable Land in California.—California Fruit.—Diversified Farming.  
 Sixth Page.—San Lorenzo Valley, Santa Cruz County.—Small Tracts of Land.—Overlooking the Business.—Thinks he has Found It.  
 Seventh Page.—Mining.—Hydraulic Mining.—Will it Spread?—The Valleys of the Foothills.—Vineyard Notes.  
 Eighth Page.—Nevada City and Grass Valley.—California's Mineral Prosperity and Bright Future.—Fresno Lands.—A Profitable Fruit to Cultivate.—Harvest Hands.  
 Ninth Page.—A Wonderful and Useful Invention.—The Root-hills of the Sierra.  
 Tenth Page.—The Foothills of the Sierra, continued.—Treatment of Steamboats.—Fruit Culture.  
 Eleventh Page.—California Mountain Parks.—A Good Word for Santa Barbara.—A Prosperous Town.—Silver Mining in Inyo County.  
 Twelfth Page.—Home Manufactures.—Planting Walnut Trees.—The Possibilities of Fruit Acres.  
 Thirteenth Page.—A Visit to Redlands.—One Success With Best Sugar.—Mountain Reservoirs.—Fool, mine County's Fruit Interest.  
 Fourteenth Page.—Good Times Ahead.—Mojave County.—Luna Beans as a Crop.—A Prediction.—Artesian Wells.  
 Fifteenth Page.—The South Yuba Canal Company.—Growth of Riverside.—A Land of Homes.—A Famous Orange Grove.—Evergreen Mill.  
 Sixteenth Page.—The Best Fruit Section.—Rail Building in California.—Orange Without Irrigation.—Unprecedented Progress in Viniculture.

## PROF. THOS. PRICE.

Departed for Europe about two weeks since. He will be absent for two months. Mr. Price stands at the head of his profession in this city. As a mining expert he has few equals. A report from Prof. Thos. Price, on the condition and quality of the ore of a mine, is taken as law, so far as knowledge can determine the value of an unworked or undeveloped mining property. His son, who has completed his studies in the School of Mines at South Kensington, London, will return with him. Mr. Price has a host of friends here who wish him well and a speedy return to his California home.

NEVADA CITY AND GRASS VALLEY. Are two of the most picturesque, quiet, soul-inspiring mountain towns in all California. In the month of May, in these sections, nature unobscured herself and comes forth, in her most inviting mood, and woos to loving embrace all who can appreciate true grandeur and beauty. The scenery here is grand! It is surprising that more of our Californian artists do not put on canvas, in colors that shall never fade, some of the beautiful pictures of nature, surrounding Grass Valley and Nevada. The people of both cities are hospitable and kind, and take pleasure in making the visits of friends and strangers enjoyable and pleasant. Around these pioneer, mountain towns clusters very interesting history. And many noble souls who have helped to make this history are now passed away, and have left, to other hands, the task of completing what they so nobly commenced—the school, the church, well-organized society, happy, permanent homes, homes that every child shall take pride in claiming, however far removed from them be may, in after life, become.

These cities are in the center of the richest mineral belt of California, and we predict great revenue from hundreds of mines that are termed "low-grade ore," and, at present, unworked and undeveloped. The future of this section of California is promising; and, in the course of a decade, will cause many, who are now asleep over unguiltful surroundings, to exclaim: Why! Who would have thought it!

Herewith we return thanks to our brethren of the press who so kindly and politely noticed, in their papers, our visit.

## CALIFORNIA'S GENERAL PROSPERITY AND BRIGHT FUTURE.

There is every reason to believe that 1883 will be counted one of the most prosperous years the Golden State has ever had. The outlook, in all directions, is certainly of a most encouraging character. "In business, as in nature, the spring forecasts the year," and, judging by present appearances, an unusually favorable year awaits the farmer, the merchant, the artisan, the miner and the manufacturer.

The managers of the Central Pacific Railroad state that, from the most reliable information to be obtained regarding the progress of the State, they have made the following estimates of the productions for this year: Wheat, 1,200,000 tons, and worth \$36,000,000. The mines will yield \$20,000,000. The wool clip is estimated at 42,000,000 pounds; worth, at least, \$10,000,000. The fruit and wine products, \$10,000,000. Cattle, for market, \$4,000,000; and sheep, \$1,200,000. Dairy products are estimated at \$700,000; and dux, silk, cotton, etc., at \$200,000. Miscellaneous products are estimated at \$100,000. This makes an aggregate of \$82,600,000, or \$62,600,000 for agricultural and kindred pursuits. Now, when we take into consideration the fact that only about one-sixth of the entire population of the State is engaged in farming, we think this is a good showing.

There were, at the beginning of this year, deposits in the banks amounting to \$93,042,243 30, against \$86,391,519.90 January 1st, 1882. This is additional evidence of the prosperous condition of our people.

We might add that the forests of the State furnish, annually, hundreds of millions of feet of lumber, which find a ready market; and our manufactures amount to something over \$100,000,000. There are, also, other products, too numerous to mention, not put down in the Central Pacific Railroad Company's list. When the vast extent of our possible agricultural productions is considered, in connection with actual results, and the present proportion of our population to the area of land suitable for cultivation, it will be seen what room there is for a largely-increased population for years to come, and what opportunities remain open for those possessing the necessary qualifications to secure homes, plenty and independence in the land most favored by nature of any in the world.

Senator Edmunds, who has recently visited many sections of the State, is reported to have said, in the course of a conversation with a newspaper representative, that in the thirty years since the American people got fairly started in their California career, they have performed an amount of labor, and created an amount of wealth that is absolutely marvelous to contemplate.

General Sherman said, not long ago (at the California Pioneers' celebration, held in New York City), that the newspapers of California have never exaggerated the wonderful resources and capabilities of the State, and scarcely comprehended the vast, varied but comparatively undeveloped resources of its agricultural and mineral wealth.

Count De Lesseps, who visited California, a year or two ago (in interviews with the press representatives here), said that he was particularly impressed with the vast resources and unlimited possibilities of the Golden State. He was amazed at the extent and richness of the country contributing to San Francisco's welfare and wealth. "It is," said he, "the one country in the world most like France; possessing all the advantages of climate, and commercial value of location, and also having many natural advantages, mineral and timber lands, and wonderful grazing lands." He closed by saying that "the future of California is sure to be grand. How can it be otherwise?"

President Hayes was reported, in an Eastern paper, to have stated, after his return from his visit to this coast, that, in his opinion, "California is the most inviting field on the continent for the establishment of paying enterprises." This is a high tribute to pay to our State, and it is true. Our climate and productive capacity give an advantage which can nowhere else be found for successful investment.

The editor of the New York *Shipping List*, who recently visited California, closes an article in his paper as follows: "California's record of agricultural development, in a

quarter of a century, challenges the world for a parallel, to say nothing of the progress that has been made in the production of wool, wine, fruit and other products of the soil, together with those of the mine, the workshop and the factory. With such a reclamation of vast and varied resources California can not fail to prosper."

Since gold was discovered, we have produced and sent into the channels of the world's commerce more than a billion dollars worth of the precious metals. Industry, in all parts of the world, has felt the benefit of the stimulus thus given to trade; the demand for labor has everywhere been increased. The gold mines of California, notwithstanding the vast treasures they have given to the world, are comparatively unworked fields. They are spread over an immense area of territory that has been proven to be rich. Far-sighted men are beginning to realize the importance of giving more attention to this great industry as a source of profit that will be reliable and lasting. It has been found that low-grade ore mines, when economically worked, pay a good profit. This is the case in Nevada, Plumas, Sierra and other counties where quartz mining is extensively carried on. Our wheat exports, during the last quarter of a century, have not been fewer than 150,000,000 cents. Apart from the precious metals, our export trade has attained a value of nearly \$75,000,000. Statistics show that, notwithstanding the many drawbacks our State has heretofore labored under, on account of its remoteness from the great centers of civilization, and other causes, yet nearly one-fourth of the increased commerce of the nation, since 1843, is due to California alone. In general commercial and financial affairs, the position attained by the State, and more particularly San Francisco, during the period of its existence, under American rule, exhibits a degree of rapid progress altogether without a parallel in history. And yet there are some who say that California has not made much progress.

So far as we are concerned, we are justly proud of our adopted State—proud of her great natural resources, which are ample enough for the comfort and support of 20,000,000 people. In our opinion, California has a brilliant and promising future, more so than any other State of the Union.

## FRESNO LANDS.

We would call especial attention to the large body of very fine land that Messrs. Easton & Eldridge will offer for sale, in Fresno county, near the flourishing town of Fresno, on the 7th of July. We think it safe to assert, that a brighter future awaits no portion of our prosperous State than this section of Fresno, its future no longer being a problem to be determined. In no section of our whole country can its fine alfalfa fields, magnificent vineyards, and orchards of apricot, peach, pear and plum trees be excelled. When it is remembered that 2,000 cubic feet of water per second—more than 30 times the volume of the Los Angeles river—meets 172,800,000 feet, per 24 hours, or enough to cover, in one year, 1,417,590 acres, 12 inches in depth, (more than four times as much land as this section contains), and that this amount, or even more, will be running over this section in 60 days from this date, it will readily be seen how thoroughly it must be irrigated; and if such lands near Riverside, Pomona and other sections now bring from \$100 to \$400 per acre, and are, indeed, cheap at such prices (when the annual revenue which can be obtained from them is borne in mind), such lands as these are certainly great bargains at from \$20 to \$30 per acre, at which price, we are informed, a portion of these lands will be sold, if no greater bid is made on the day of sale.

## PERSONAL.

T. K. Dow, of Melbourne, correspondent of *The Australasian & Argus*, paid us a fraternal visit. Mr. Dow will remain with us, in all, for several months.

## A BIG CLEAN UP.

The Mayflower Hydraulic mine, at Forest Hill, cleaned up last week after a run of about four weeks, and realized some \$25,000. This, now, is one of the leading hydraulic mines on the Forest Hill divide.—*Cor. The Herald*.

## A PROFITABLE FRUIT TO CULTIVATE.

It has been demonstrated, by practical experience, that the cherry is just as easily cultivated, quite as sure a crop, and will pay fully fifty per cent more, to the tree, than any other kind of fruit of the same age and size. We have been informed that at Soquel, Santa Clara, and other places, there are cherry orchards, from fifteen to twenty years old, that yield annually a crop worth from fifty to sixty dollars in the tree. When we take into consideration the demand and exorbitant prices which this choice fruit brings, it seems somewhat surprising to us that the area planted to cherries does not increase faster. In addition to what is consumed in home markets, a large amount finds ready sale across the mountains. 'Choice cherries retail, in this city during the entire season, at an average of twenty-five cents per pound. There is a large profit in cherries, especially the finer varieties. Just think of it! An orchard of five acres, containing sixty trees to the acre, yielding fruit that will sell readily every season for from \$15,000 to \$20,000. The Los Angeles *Herald*, after mentioning the fact that the first cherries of the season sold in San Francisco at 75 cents per pound, adds: "Who says it doesn't pay to grow cherries? No fruit pays better than this, and none as well." The market has never yet been supplied with half the amount needed. We again urge upon our horticultural readers the necessity and profit of planting cherry trees. Los Angeles county produces fine cherries and should have 10,000 more trees to supply the market with fruit."

We trust that hereafter more attention will be given to the cultivation of this really valuable fruit. The cherry tree will thrive in almost every climate of the State, from Modoc in the north to the almost tropical San Diego in the Sunny South. Inasmuch then, as this fruit is so much sought after both at home and abroad, we cannot see any plausible reason why it should not be cultivated on as large a scale as any other kind. We throw out these suggestions for the benefit of those who, perhaps, have not heretofore had their attention called to this branch of fruit culture, with the hope that they may give it careful attention.

## HARVEST HANDS.

There seems to be but little doubt of the fact that there will be a scarcity of laborers to harvest this year's crop. We see it stated, in our interior exchanges, that this question is already being discussed by farmers. The Modesto *News* says that several farmers have requested the editor of that paper to make it known, through its columns, that there will be an extra demand for laborers in the harvest fields of Stanislaus county, the prospect for a very large yield making it important that laborers should be notified of the demand. The *News* thinks that there is no doubt, but a thousand laborers will be able to find employment, for several months, over and above the supply already on hand, in that county alone. The wages will be as liberal as any in the State, ranging from two to four dollars per day. The *News* trusts that the San Francisco papers will give notice of this fact as there are hundreds in its streets who may want to make a stake in the harvest fields. In several other counties the same fears are expressed, and the local papers chorus the same song; and, in addition, they intimate that the large farmers will be unable to procure sufficient threshing machinery to enable them to finish their work within the time usually allotted to the harvest months.

Generally, at this time of the year, just before the commencement of a prominent harvest, interior towns are overrun by unemployed men, who have San Francisco, and other large towns, for the purpose of seeking employment in the harvest field. But this year seems to be an exceptional one in this respect.

Were it not for our peculiar climate, which allows the harvest and threshing season to be extended through a portion of the fall, such a harvest as the present one could never be gathered. We are satisfied that California will produce as much grain, and, in fact, everything else, as in any former year. Through increased settlement in every portion of the State, a larger acreage has been worked than ever before. A traveling correspondent of a city contemporary, who has had excellent opportunities for judging, says that the labor supply in California to-day is not equal to the



demand, and that every person, honestly desiring employment, can obtain it. Consequently, there is no excuse for idleness. The writer, in question, states that it is unfortunately true that there are hundreds, and perhaps thousands, who would rather growl than work. Of the approaching harvest he is of the opinion that the labor force obtainable will be insufficient to gather the grain. He advises all idlers in the cities to push out into the country. By idlers he means honest unemployed laborers, whose only capital is their hands and willingness to work for good pay. Even on the west side of the great San Joaquin valley fair crops are assured since the late rains. In our judgment, there will be not only room in the harvest field for every laboring man and boy now in the State, but for hundreds of new-comers.

The harvest will afford the latter class an opportunity to become not only acclimated, but it will also give them the very best chances to get initiated into the ways and habits of California farming, that will be of incalculable benefit to them. In other words this probationary season will serve as a stepping stone in their future career. They can save money enough with which to make a beginning wherever they may locate. Taken then, all in all, we are of the opinion that the coming harvests will be the means of opening the door of a bright future to many a new-comer.

#### A WONDERFUL AND USEFUL INVENTION.

Our attention has been recently called to one of the best and most practical inventions, in connection with house building, that has been discovered, for a half century, in the shape of a novel window sash; and its perfect simplicity excites our wonder and admiration. Wonder; that it has never before been invented; admiration: in the genius that has given birth to a so much-desired improvement in the construction of a window.

By this invention a window can be washed from the inside of the room, without exposing the person to the danger attending the present manner of washing windows by setting or standing on the outside. There has been felt, for a long time, a necessity for some such construction of a window sash, whereby the trouble and difficulty now experienced might be avoided, to say nothing of the peril of life and limb, by the one cleaning the sash, and we think that this invention must attract the notice and admiration of all housekeepers and house builders. The sash is opened by means of a "ketch" inserted on the side of the frame of the window revolving on a pivot in the center of the sides of the sash, thus reversing the window sash at pleasure, drawing the sash down and cleaning it on the inside of the room, without having to remove any part of the frame work, and there being no springs the most inexperienced servant can not get it out of order. Time and labor are saved, and all danger is overcome, and, we think, humanity and economy will induce all persons, owning houses or about to build, to make use of this very simple, though amazing, contrivance.

The inventor is Mr. A. Rudolph, of San Francisco, a gentleman of education, and, moreover, a genius of rare ability, and we bespeak for him great success from this practical and so-much-needed improvement. A model window frame and sash is now on exhibition at the office of John Middleton, No. 14 Post St., in this city, and we would advise all persons about building to call and see it, and observe the perfect ease and simplicity of the movement of the sash.

We predict that, this sash will, in a very brief time, come into general use, as the cost over the present one is very small, and its advantages are great and unmistakable. Letters patent have been issued, in this country and in Great Britain, and we trust the inventor may reap the rich harvest that his brain has earned.

#### ANCIENT GRAVEL BEDS.

A correspondent says: There is an immense extent of auriferous gravel, capped with cement, lying in El Dorado county in the vicinity of Volcanoville, which has yet been only partially prospected, and which is said to contain untold millions of wealth. A better opportunity for the safe investment of capital is not offered anywhere in the State, than in opening up the ancient gravel beds of El Dorado county.

#### THE FOOT-HILLS OF THE SIERRA.

##### Crowning Glory of California.

[Written for THE RESOURCES OF CALIFORNIA, by James O. Knapp.]

"Thank God! we are once more back in California," was the remark of a gentleman whom the writer met, only a few days since, who, with his family, had just returned to the State, after an absence of four years. And this, reader, is the heartfelt sentiment of every man, or woman, who has ever enjoyed the superb climate, breathed the glorious air, gazed through the peerless atmosphere (which has no equal), or slaked his or her thirst with a drink of the pure, crystal element that flows from the countless ice-cold rills, whose source is the snow-clad summit of her eternal mountains, and which, under the same circumstances would fondly be re-echoed by the thousands of old Californians now scattered, far and wide, over all the earth, who, like the mythological first parents of the heathens, once having crossed the bridge that stretched to the mainland paradise, were never more able to return.

We have but one chance in life. It comes sooner or later to us all, and if we fail to seize and improve it at the opportune moment, all is lost, and this world henceforth becomes to us a listless blank.

Notwithstanding the many years that have come and gone since the time when public attention was first called to California—through the wonderful gold discoveries which, at the close of 1848, formed the all-absorbing topic of the civilized world—people in our own country, at the present time, as well as those beyond the ocean, seem to have but a slight conception of what can actually be accomplished here, and of the stupendous results that will certainly obtain in the course of the next 25 years.

The truth of this is demonstrated daily by the remarks of highly-educated and distinguished persons, who have made the journey hither for the first time, and who, in every instance, express the most unbounded admiration and astonishment at the unprecedented resources apparent on every hand, and of the matchless beauty of that climate which, once enjoyed, can never be forgotten, and which, all unhesitatingly concede, has no counterpart on all this earth, it partaking of the nature of every other, from the equator to the poles.

The changes of the last 50 years have been very great, and cover every class of human experience, and so truly is this the case, that it has become an established principle that the time has arrived when our young men must seek new avenues of employment, abandoning forever all thought of the pursuits through which their fathers, and immediate ancestors, gained their livelihood.

As civilization advances, the Indian finds himself a natural born hunter, with neither hunting ground nor game, and is literally forced, by stern necessity, to loiter around the frontier towns and railroad stations there to earn, beg or steal a living as best he may; demoralization of the worst kind ensues which, sooner or later, ends in the utter extinction of him and all his race.

The same remarks will apply, with comparative force, to the young man who, arriving at maturity, purposed to follow in the footsteps (using the term in an industrial sense) of the two preceding generations.

During the period alluded to, we have, as a nation, advanced very rapidly from extreme poverty to very great wealth, and while there are many citizens whose fortunes run up into the millions, from ten to a hundred millions for that matter, there is a vast aggregate who are the possessors of from three to five thousand dollars, and it is to this class in question I wish to address the subject matter of this communication.

California is the most wonderfully endowed region known. It we take a map of the State and study it carefully, the fact will become apparent that nature evidently intended her to become, some day or other, the seat of a mighty empire. First of all, she is second in size, when compared with the other States (Texas alone being the larger), and is capable of sustaining a population of 20,000,000 of people. Her principal harbor is the largest in the known world, its grand entrance—the Golden Gate—being located very nearly on the exact center of her coast line. It extends a distance of over 60 miles inland, and at its northern end receives the waters of the two

great rivers, Sacramento and San Joaquin, the former flowing southwardly from the northern portion of the State through the Sacramento valley, and the latter northwardly from the southern portion, through the San Joaquin valley. On the eastern side of these two valleys stands the great Sierra Nevada, with its summit of eternal snow, 12,000 feet above the level of the sea. Having their source in this mighty range of mountains, and running westwardly towards the two streams alluded to, are twelve other rivers which, in their course, traverse the foot-hill region, which I have particularly and very explicitly described in the April and May numbers of this paper, of the present year.

This section also comprises the gold region of the State, and is the locality from whence all the precious metals have thus far been taken, and which, far from being exhausted (as many people suppose), has only been skimmed over.

The water there is of the purest possible character, equal to, and probably the very best upon the whole globe. In this region can be raised, successfully, every product the human heart can rationally desire, embracing all the known fruits, vegetables and cereals of the temperate and semi-tropical zones. Magnificent pasturage for cattle, horses and sheep, and a water power sufficient to run a hundred thousand large mills, and still have an equal quantity held in reserve.

Iron and copper mines, the former producing pig iron equal to the best imported, together with every other known mineral, and very extensive quarries of magnificent marble, granite and basalt. Sugar pine trees in great abundance, twelve feet in diameter, and a vast wealth of other timber for all ordinary purposes.

It is in this remarkable section that the great Yosemite valley is situated, and here, too, is the locality of the wonderful Big Trees, some of which are one hundred and odd feet in circumference.

When the vast gold, and other mineral deposits, heretofore unheeded of water power, immense timber resources, splendid pasturage and great areas of land especially adapted to viticulture and fruit growing are considered, the mind actually becomes bewildered, and instinctively asks the question, must it not, will it not, and what power on earth can prevent this great section from becoming, eventually, the grandest, most beautiful and opulent in the whole world; and why cannot California sustain a population equal either to France or England, especially when it is considered that the foot-hills alluded to embrace but one-third of her vast domain? And, reader, the time will come, when the population of this State will be fully as large as that of either the countries referred to. Even now, there is no place where the poorer classes get so many of the comforts of life; and when the day arrives that the great foot-hill region is fully developed, it will be, beyond all comparison, the best place for any one to live in, no matter what the occupation. We are connected, by railroad, with New Mexico, Colorado and Texas, and to bring cattle hither from those places is but a matter of three or four days. In fact, California is so situated that very high prices for meat, and other articles of food, can never rule.

As I stated at the commencement of this article, the boys of to-day find themselves in very much the same condition as the Indian; and it has become a settled fact that they must abandon the old and played-out methods of gaining a living which, even at best (owing to the productive power of labor-saving machinery), would only afford the most meagre kind of one, while the idea of a young man marrying under such circumstances would be absolute madness.

This state of things exists, to-day, in every part of America, and can not be ignored. In fact, it must be looked squarely in the face, as it means nothing more nor less than the literal extinction of the American element in our population; and this brings me right down, at once, to the great foot-hill region of California, which, to my mind, is the very section designated by the Great Creator expressly to meet this crisis in American affairs.

Here is the exact place, my friend, to locate, and I will tell you why. You have sons and daughters who have received a splendid education, such an one as the grand free-school system of this great nation affords to all its children. They are somewhat refined and,

naturally, shrink from what modern society calls "course, menial labor"; and I do not know how we can very well, under the circumstances, blame them; feeling, and justly too, that they are fitted, by nature and education, for something better. The learned professions afford no hope whatever. Clerkships, now-a-days, have degenerated into literal white slavery. A trade is a relic of the past, and finally, to become a producer of raw material, in some shape or other, seems to be the only available chance left; and right here, in the foot-hills of the State of California, is their great opportunity, and yours also.

Cattle breeding is very profitable, but it requires a peculiar style of man, and there is a sort of wild life connected with it that might make your sons degenerate into cow boys. Hog raising, too, will surely pay, and is certainly a good business, in one sense of the word; but what you desire for your boys is something that will give their education and taste a chance to become available. Agriculture is grand, but, in order to become very profitable, it must be carried on upon an extremely large scale. This brings us to viticulture and fruit raising, and here we have the very best business above all others. We need seek no farther; for, in California, it means health, wealth, happiness, manly independence and a glorious opportunity for education, refinement, intellect and taste to have full play. A business that demands, for that matter, these exact qualifications, and which, in consequence of the immense strides made of late in the process of drying, canning, and otherwise preserving fruit, is destined to become one of the most profitable pursuits possible to engage in; and California will become, and that, too, in the not very distant future, the great wholesale depot of the world for these products. Even now, wherever known, they take precedence over all others, the beautiful canned apricots of this State gracing the tables of the nobility and wealth of Europe. There is, literally, no end to the demand for all our productions, and if every acre of the glorious foot-hills in question were under cultivation, every pound of the combined product would find a market.

The reader will, doubtless, ask the question, why is it that I lay such stress upon California, and especially her foot-hills; and if it is possible that no other section can raise the products referred to, and come into competition with her.

Florida produces oranges of a delightful flavor and quality, but it is the home of yellow fever, disease and death; and this fact holds good with reference to all the Gulf States, to Mexico, many of these products can be raised, but there the tarantula, figger, scorpion and centipede abound, and beside all these, the climate is too debilitating. Next comes the Central American States, and with them one of two things, either the Panama fever and death, or a torpidity of the liver which, in short order, will take all the snap and go-ahead right out of a man. Capitalists may try their best, and statesmen may prate about the grand Republic that will, one day, reach to the Isthmus of Panama—but it will never be. Nature has forbidden it, and a human being's liver has a great deal to do with his actions. Let that once get chronically torpid and he will keep very quiet, and, as a business man, will never more be heard of. The Sandwich Islands possess a fine climate; but there, leprosy looms up its awful head; and the islands of the Pacific are mostly in the hands of the Cannibal. In the Northern States the climate is too cold, and season too short; and, of course, in British Columbia even more so.

It will thus be apparent to every one, that for such a business as viticulture and fruit raising to rise to the immense proportions I have outlined, the climate and locality must be of the very best possible character; and this is where California is supreme, the statement being as true as was the old saying, with regard to the Southern States, that "cotton was king." To illustrate: Not only must the climate be adapted to raising the grape, but, in order to make them into raisins, the long, dry, hot weather of September and October is necessary, and right here is where 180 to 200 days of consecutive sunshine beats every other portion of the known world. Finally, to sum the whole matter up in a few words, she has the soil, climate, extremely long season, that is free from even a vestige of cloud; and right here, in this glorious section, millions of men, women and children can work without fear of malaria.



or intermittent fever, and even the consumptives, if not too far gone, can be cured. Some other portions of the world might be able to raise the fruits, but climate, disease and the political nature of the government, as well as land titles and other troubles, present obstacles insurmountable. This region, however, is in free America, and much of the land can even now be pre-empted and purchased at a comparatively low price. Never before was such an opportunity offered to every man, who has the means to obtain his land, fence and improve it; and my advice to every father in the country, who comes within the category I have described, is to neither halt nor hesitate, but study into the merits of this subject at once, taking for his guide, at the outset, the two preceding communications, published in this paper, upon the subject of the foot-hills of the Sierra. As I said before, the state of things that has been brought about by the great mechanical and inventive changes of the past 50 years, can not be ignored any more than the fact that old age creeps on apace. We must look the world squarely in the face, and shape our course accordingly; live strictly in the present, with a keen eye to the future, and more especially is this imperative in these times of rapid change and wonderful development.

The grandeur that California will reach, within the next 40 years, can scarcely be estimated; and before closing this communication I wish to call attention to still another of her mighty resources, that now goes literally to waste, which could be made, annually, to be worth, I might safely say, \$200,000,000.

It is well known that the Sierra rises to an altitude of from 10,000 to 15,000 feet, the summit being covered with perpetual snow, and the slope of the mountains, for fully 40 miles, with a depth of from ten to twenty feet. In other words, a strip of snow 750 miles long, 40 wide and from ten to twenty feet deep, not to mention another section still higher that has stood there for ages. This snow commences to melt about April 15th, and keeps on melting to the close of the summer, and every drop of this vast body of water goes to waste, running down the rivers into the Sacramento and San Joaquin, and thence on to the Pacific Ocean. Think for a moment what good this water would do. If saved, it would transform every acre of the Sacramento and San Joaquin valleys into hundreds of thousands of small fruit farms of the most fertile character and beautiful description. We talk about Egypt and of the Nile, while right here is a country as much ahead of that famous land as the electric light is beyond that of gas. Is it not time that people woke up to these great truths, and began to realize that there is but one California, and that she embraces within her limits all that is needed to bring about the grandest state of civilization ever dreamed of even by the most visionary enthusiast?

If I may be allowed to use the language of the card-player, we hold the ace, king, jack and ace of trumps, and then only make high low, losing the jack and guine. Never since the world was created were people the possessors of such a country and such an opportunity, and never did any people seem to appreciate it less.

If all I have to say of the unbounded resources of this State be true, and I can not certainly see how anyone can dispute a word of it who is acquainted with the facts, what a destiny is in store for California, and what a pinnacle of grandeur may she not, one day, reach; and why can not she be made to support fully as large a population as France or England.

This, then, is the great chance for the young men of to-day. If they are wise and resourceful, they will go on with the flood of opulence. If they spurn it, and coward-like attempt to float with the current, and follow in the old played-out grooves of the past, their fate will be as negative as that of the Indian.

There is neither good nor bad luck about the matter, nothing in fact but cold-blooded, stern, unsympathizing logic, which is as susceptible of demonstration as the simple arithmetical proposition that two times two make four.

#### BEEES.

The Livermore valley apiarists have suffered considerable loss the past fall and winter from the bee moth. Just now special pains are taken to secure the fast outpouring new swarms to repair the loss.

#### TREATMENT OF STAMMERING.

Mr. J. E. Snitterlin has for eight years conducted an institution in this city for the cure of stuttering and stammering, with most satisfactory success. His system is philosophical and simple, and is based on the plainest common-sense principles. Excluding reliance on medical aid, it comprises chiefly careful drill of the vocal organs, and such mental discipline as will contribute to the object. In the first stage of treatment, the subject is not permitted to talk, except to practice his exercises, and to make such movements in speech as can be guided and observed by the teacher. During this time he is taught to consider himself, not a patient, but a student of speech. In the second stage which is begun when enough has been done in the first, the pupil is encouraged to talk, for practice, at every opportunity, with a "legato" movement (as in music) and a strong accent. In the third stage he is allowed to talk more naturally, but in a studied manner; and in the fourth stage he is permitted to employ his normal way of speaking, but is by this time relieved from the impediment under which he formerly suffered. The psychic part of the treatment, which aims to divert the pupil's mind from himself and his troubles, is the most difficult and, at the same time, the most essential part. The time required for success depends very largely and, in fact, chiefly on the mental constitution of the subject.

From this brief description of an effective method of treatment, the parent may gather the useful hint that, to remedy any incipient tendency to his child to stammer, he should exercise a mild and kind but firm ruling, suppress all irritability of temper, observe for the child all the laws of health, and be careful as to his own manner of talking and the patterns he may set for the child. By attention to such matters, even the most unskilled may correct the evil before the child begins to be conscious that he is a stammerer; and, by a general regard to such principles as are here laid down, the affliction might be wholly removed or its frequency greatly reduced in the course of a generation or two. The statistics collected and preserved by Mr. Snitterlin show that the stammering habit is contracted, with only very rare exceptions, between infancy and ten years of age.—*The Popular Science Monthly* [N. Y.]

#### FRUIT CULTURE.

Fruit trees begin to bear at a very early age in California, peaches often in the second year, and apples in the third year, while a five year-old orchard, well treated, bears a heavy crop. Owing to the dry climate, the many perishable fruits keep longer and travel better than in other countries—California strawberries and cherries stand a week's railroading with but little damage.

The rapid growth and large size of our fruit trees astonish the stranger; an apricot of eight-years old is a large shade tree, and this particular fruit has given some of the very best general results, its great delicacy of flavor making it a general favorite for all purposes.

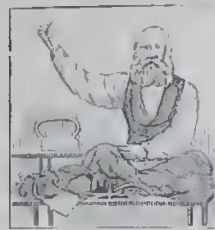
In 1879 a twelve-acre apricot orchard yielded 31,000 pounds of fruit, sold at five cents per pound, clearing a net profit of \$1,200 per acre. Bartlett pears have been known to pay a profit of \$3,000 per acre. Peach orchards, in good years, have produced 27,000 pounds per acre. But while those figures are quoted as representing unobtainable possibilities, let us put our probabilities at much lower figures, which will still leave highly satisfactory profits. Some kinds of apples and pears often remain on the trees until December, quite unimpaired by frost.

Shipments of fresh fruit last year amounted to 10,000,000 pounds, and this, in spite of high freights in refrigerator cars and other difficulties, is found to be a highly profitable business. There is also arising much competition in buying up productions of orchards by large operators who employ well-trained hands to gather and pack the fruit, and sometimes dry it in the orchard.—*San Jose Recharge*.

#### A LARGE WOOL CLIP.

Mr. C. Nelson sold his spring wool clip last week, from 3,100 head of sheep he sheared 13,765 pounds of wool, making an average of 4.43 pounds per head, which Mr. Nelson thinks is the largest yield he ever received. The price paid for the wool was twenty cents per pound. Some of our Yuba county wool-growers have secured better prices than this.—*Yuba Democrat*.

## NICOLL, The Tailor.



JUST RECEIVED

A Fine Assortment of Foreign and Domestic Woollens for this Season.

CALL AND SEE OUR NEW PATTERNS!

Suits to order, from..... \$20 00  
Pants to order, from..... 5 00  
Overcoats to order, from..... 20 00

Also—To accommodate our numerous Country Patrons visiting the city for a short time, I have had a Splendid Stock of

**MEN'S, BOYS' AND CHILDREN'S READY-MADE**

**SUITS AND OVERCOATS.**

Manufactured by Ourselves, after the Most Approved and Latest Styles, in Custom-Made Patterns.

**WELL CUT, WELL MADE, STYLISH AND CHEAP.**

You will do well to inspect before purchasing elsewhere.

CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

**NICOLL, The Tailor,**  
PHELAN'S BUILDING,

**816 & 818 Market Street,**  
**SAN FRANCISCO.**

BRANCH STORES IN ALL PRINCIPAL CITIES.

## PACIFIC COAST LAND BUREAU.

President, - - - WENDELL EASTON, Auctioneer, - - - J. O. ELDRIDGE,  
Vice-Pres. and Gen. Man., GEO. W. FRINK, Secretary, - - - F. B. WILDE.

**NO. 22 MONTGOMERY STREET,**  
**San Francisco, California.**

Sub Agencies at Each County Seat of the State,

**AGENT FOR THE SALE OF LANDS OF THE CENTRAL AND SOUTHERN PACIFIC RAILROADS.**

Agency for Sale and Exchange of Farming Lands, Large Tracts Subdivided and Sold at Auction or Private Sale.

## IRRIGATED VINE LANDS

**IN FRESNO COUNTY,**

**Church and Marks' Tract,**

Near the flourishing town of Fresno, but only hours from San Francisco by railroad, and possessing one of the most healthy and delightful climates in the world. Homes for all, 1000 acres of land divided into lots of any size. A PERPETUAL WATER RIGHT FOR IRRIGATION SOLD WITH THE LAND. Canals from the next-rising waters of Kings river. The wine and raisin crop is California's greatest bounty. Corn and vineyards \$100 to \$200 annual profit per acre. Plant only on irrigated land, for it is the most profitable, the water is the only protection against phylloxera. The land is level, slightly inclined toward the west, and really for immediate use; the soil is a rich, sandy loam of great fertility. No fever and ague, and no throat and lung troubles the dry air of this section has equals in any other part of the country. See United States Census reports, Sierra Nevada traverse this tract and each owner can have water.

It is the cheapest and most desirable land now offered in this market, and we court comparison with any other land in the State. Price, with water right and canal to each quarter section, in subdivisions any size,

**\$40.00 PER ACRE.**

Payable one-fifth cash, balance in annual installments to suit.

President WENDELL EASTON will lecture on Fresno county and its advantages for settlement, at a public meeting to be held at Bushway Hall, on Saturday evening, June 23d.  
Excursion Train will leave San Francisco on July 31st. Tickets for round trip, good for nine days, ONLY \$2.00.

For maps, circulars, reports and letters from resident farmers and the landists, and all further information apply to the

**PACIFIC COAST LAND BUREAU,**

Office, No. 24 Montgomery Street, San Francisco.  
Or to W. P. HABER, Fresno.

1867.

**W. M. BRANDON & CO.,**

ATTENTS FOR—

Renting, Management, Buying, Selling or Exchanging

**REAL ESTATE AND OTHER PROPERTIES,**

In City or Country.

—BUY AND SELL—

**ON COMMISSION OR PRIVATE ACCOUNT.**

**Appraisements Made at Reasonable Rates.**

**MONEY LOANED ON REAL ESTATE, COMMERCIAL PAPER, GOOD NOTES, ETC.**

311 KEMANA ST., S. E. CORNER PINE,

—BRANCH OFFICE—

Corner 20th and Folsom Sts.,  
**SAN FRANCISCO.**

Telephone No. 221, Call 3

**\$1,350.** 20 ACRES OF LAND, ONE MILE from Howard's Station, fronting on main road. Two acres of the land under good cultivation, and the balance heavily timbered. Place fenced into two fields. Enough timber on the place to easily pay for it. Comfortable house of five rooms, small chicken house and a corncrib. Well watered by running springs. Healthy locality, and splendid place for poultry.

**\$6,000.** 100 ACRES OF LAND, THREE miles from Fort Jones, in Sonoma County. 300 acres in pasture land, and 70 acres under cultivation. Good orchard with variety of fruit. The balance in timber land. Good house, barn and out-buildings. To go with the place, 10 head of stock, 3000 posts, 30 cords of peeled oak wood. Nice place, good climate, and only two miles from postoffice. Plenty of fine water, and fish and game in abundance.

**\$3,500.** 250 ACRES OF LAND, FOURTEEN miles from Chico, all devoted land, consisting of timber and grazing land. Seven acres in hops, five acres three years old, and two acres young hops. Good house that cost \$500, barn and out-buildings. One set of blacksmith tools, plows, hammers and all farming implements. Also, to go with the place, three cows, twelve hogs, twenty Angora goats, three wagons and other articles. Very cheap.

**\$5,500.** VINEYARD OF 17 ACRES IN Sonoma County; all full bearing vine and choice varieties.

**\$3,100.** 45 ACRES FINE LAND, NEAR Petaluma. Good house; large barn, splendid supply of water; well fenced.



## FARMERS

BUY THE BEST

## AGRICULTURAL MACHINERY.

SCHUTTLE

### Farm Wagon,

Warranted to last longer with less repair than any wagon made.

Adriance Buckeye Mowers,  
For 22 years the leading Mower of the World.

Taylor Wheel Horse Rake,  
The best Hay Rake on wheels.

Dedericks Perpetual Hay Press,  
Has superseded all other Hay Presses. Puts 10 to 12 tons of Hay in a car.

Rice's Straw Burner Engines,  
Only successful Straw Burner made.

GOLD MEDAL THRESHER,  
Does more and better work than any Thresher manufactured.

Hodges and Case Headers,  
Superior in make and lighter in draft than any other Header.

PERKINS' WIND MILLS,  
Warranted to run lighter, more substantial, better principle of construction, less liable to get out of order than any other.

HOWE STANDARD SCALES,  
Superseding all other make of scales. Adopted by U. S. Government and all the leading Railroads of the Country.

Glidden Barbed Wire,  
The standard Barbed Wire of the Country, ten times as much sold as any other Wire made.

Enterprise Coffee Mills,  
The most perfect constructed Mill in use.

Nails, Rope, Plows, Cultivators and Staple Hardware and Agricultural Implements FOR SALE AT SAN FRANCISCO PRICES AT

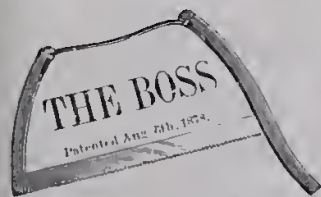
HAWLEY BROS.' HARDWARE CO.,  
301-303 MARKET STREET,  
SAN FRANCISCO, CAL.

O. P. SHEPHERD. J. PATTERSON. N. W. SPAULDING.

PACIFIC SAW  
Manufacturing Company,

17 & 19 FREMONT STREET,  
SAN FRANCISCO.

A NEW WOOD SAW!



THE LATEST, THE BEST.

The above illustration shows an AUTOMATIC SELF-STRAINING WOOD SAW FRAME. The saw is straitened by means of a Steel Spring secured to the wood and pieces with Metal Bands. With this device a saw is perfectly and automatically straitened at all times. No cross bars or braces are required to give stiffness to the frame. The space in wood saw frames usually filled up with such devices is left open, giving the saw greater capacity for sawing large slices of wood, wide planks or boards. There is no screw straining rod to get out of order.

Price, complete with Pacific Saw Mill Co's Extra Blade, set and filed, ready to work, each, \$1.50; with their second quality blade, set and filed, ready to work, \$1.25; with imported blade, set and filed, ready to work, \$1.00.

A LIBERAL DISCOUNT TO THE TRADE.

AGENTS FOR C. B. PAUL'S  
CELEBRATED FILES.

Planting Knives, Currier Knives, Saw  
Mandrels, and Saws of Every  
Description Made to Order.

## EDGE HILL

### VINEYARD, WINE CELLAR AND DISTILLERY,

Near St. Helena, Napa County, California.

SCHAEFFLER'S CELEBRATED VACUUM DISTILLED

### SANITARY BRANDY

—AND—

### Brands of Red and White Wines.

STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED

Burgundy, Bordeaux and  
Rhine Wines.

Orders Received and  
Promptly Attended to by

WM. SCHEFFLER,

PROPRIETOR.

## COMMERCIAL INSURANCE COMPANY

OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, Dec. 31, 1882, \$376,978.08

Losses Paid Since Company was Organized, \$867,528.70.

JOHN H. WISE, President  
CHAS. A. LATON, Secretary

OFFICE.

No. 405 California Street, S. F.

## THE CALIFORNIA POWDER WORKS.

Santa Cruz Gunpowder.

HERCULES AND MINING POWDER.

SUPERIOR SPORTING POWDER.

CABINET, EUREKA, QUALITY and DUCK Shooting.

Pacific Rifle and Pistol Powder.

ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
Kegs.

SHOT,

CAPS,

WADS,

AMMUNITION,  
FUSE, Etc.

PRINCIPAL OFFICE.

No. 230 California Street,

SAN FRANCISCO, CAL.

### CALIFORNIA MOUNTAIN DAIRIES.

The Truckee Republic has the following: It is not generally known that the choicest table butter used on the Pacific Coast is made in the vicinity of Truckee during the months of June, July, August, and September by dairymen who make limited quantities in the valleys in the spring before moving to their mountain ranges. The reason why mountain butter possesses such superiority over butter made in the valleys is because of the climate and feed together with the greater skill of the mountain dairymen, make a combination of circumstances more favorable to its successful manufacture than can be found elsewhere on the coast. With these dairymen the manufacture of butter is a profession. The Truckee basin is a dairyman's paradise. The numerous valleys and dales, during the months of June, July, August, September, and October, abound with the choicest native grass, and the dairymen having found this out, never fail to take advantage of it. As early as the first of June the dairy rancher arrives from Sacramento valley, where he has wintered, bringing his drove of milk cows, his lots of choice pigs, his coops of poultry and herds of calves, and puts his ranch in order for the summer campaign. Squaw valley, Twin valley, Lake valley, Russell valley, Martin creek valley, Prosser creek valley, and the numerous small valleys all have their ranches, which, when the season sets in, are occupied by old and experienced butter men, who bring all the modern appliances, in the way of patent churns, improved setting pans, etc. The cows yield a bountiful supply of pure, rich milk, and grow fat, and their owners prosper. In and about Lake Tahoe are many favorite feeding spots, and there is not a nook or vale but it is known to the dairyman, and occupied. Close to Truckee there are fifteen or twenty dairy farms that each year send to market over 60,000 pounds of the pure article. Sardine valley, Sierra valley, Weber lake range, and the valley of the Little Truckee are all favorite feeding places of the ranchmen, and their cabins and dairies dot the green meadows, and all yield good returns to the dairymen. The butter from these mountain dairies is esteemed very highly, and always brings an advanced price in the market. By the first of March and the following season the supply is always exhausted, and often advanced orders eat largely into the product of the season. The regular climate and cool nights are great desiderata in butter-making, and combined with the rich properties of the mountain grasses it is no wonder that Truckee butter should ever command a premium. Cheese factories are being talked of, and it is thought the near future will see them in active operation. At present the milk left after the butter is extracted is fed to the pigs and calves, which, by the time the season closes and the dairy men ready to depart, are ready for market, and literally "as fat as pigs." Most of them are bought up by the local butchers at good prices.

### A GOOD WORD FOR SANTA BARBARA.

The following is an extract from an interesting letter, concerning Santa Barbara, written by a stiff correspondent of the New York Tribune, who has been spending several months in that pretty town:

The situation of Santa Barbara is almost exactly the same as that of the towns on the Mediterranean Riviera, Lake Monaco, Mentone, San Remo, and other popular resorts of that famous region. It lies under a lee of a wall of mountain running east and west. The strip of coast slopes gently towards the south, and the houses look out upon a warm and quiet sea. Owing to the trend of the shore and the protection of a line of islands, the cold currents of the Pacific are not felt here. A placid little nook of ocean seems to have been provided by nature, where the sun shines almost always, and the hurly-burly of traffic and speculation is hushed. The nearest railway station is 30 miles away, on the other side of the mountains. Once Santa Barbara had its era of great expectations, like all the other settlements in California; and it built a great many more shops, and "business blocks" than it had any use for; a theatre which is hardly ever opened, and a big college, from which the last pupil long ago departed. But the fever soon burned itself out; there was really so little for it to feed upon. A period of steady industry and moderate thrift has followed. Little by little the community is growing up to the capacity of its premature building, and looking forward to the time when it shall have a railway, and vines shall cover the foothills, and the bountiful soil shall show its capacity. Meanwhile, there are sheep, and cattle, and fields of grain; apricots are raised in large quantities, for canning; and one ranch is famous for the production of olive oil. The orange groves that I have seen are young, and do not look healthy. Provisions, of various kinds, are brought by steamer, from other parts of the coast. A large proportion of the inhabitants are people of leisure, elegant or otherwise. Their lives are marked by ease, simplicity and content—which are not the characteristic virtues of California, but are comfortable qualities nevertheless. Many came here from the East for health, and, having found it, they have resolved to stay for life, farming, or trading, or following whatever other calling they may be fit for.

### A PROSPEROUS TOWN.

From the following, taken from the Courier, it will be seen that the future outlook for Petaluma is unusually bright:

Every store and place of business is occupied, and nearly every dwelling desirable for a residence rented. We hear considerable inquiry for property both in town and the surrounding country, and several sales have recently been made at fair prices. We have the best market for all kinds of produce in the State outside of San Francisco. Owing to our having both water and railroad communication with the outside world, our freights are so low that our merchants pay, for all kinds of products, only a fraction less than the city prices. They pay cash for all products offered, and the seller can buy wherever he pleases. There is no harter such as is usual in country towns. Our death rate for the last twenty years will show that there is no healthier location in the State. Our public and private schools cannot be surpassed anywhere. Our land is fertile, and will produce almost every variety of crops. Our seasons are sure, and we have never failed in the dryest years to raise a crop. Owing to a variety of productions, we have a stream of gold that ebbs and flows from one end of the year to the other as regular as the ocean tides. In the fall, winter, and early spring, the fruit, grain, hay, potatoes, wool, wine, poultry, eggs, etc., keep the market lively, and during summer we have butter, cheese, hay, calves, stock, fruit, eggs, poultry, and other things, all bringing in a constant stream of money. Our merchants sell goods so near San Francisco prices that farmers can do as well here as there. We have the best of mountain water and an abundance of it. Our people are peaceable and law-abiding, and yearly becoming more independent, as the improvements about their homes will show. Petaluma is a good place for almost any kind of manufacturers. Land is reasonable, and can be purchased convenient to navigation in large or small lots. Our natural drainage is unusually good. We have fresh breezes from the coast 18 miles away, throughout the season, and no malaria anywhere in the surrounding country. Our scenery of mountain and valley is not surpassed by any town on this Coast. Standing on the hill, and not far from the center of our city, we have a fine view of all the prominent features of the country, from San Pablo bay on the south to the mountains along Russian river and about Clear lake on the north, and from Mount St. Helena and the Napa and Suisun mountains on the east to the Coast hills on the west. We cannot, in a newspaper article, tell half of our advantages. All we ask of persons seeking homes or a location for manufacturing purposes, is to come and see for themselves before locating elsewhere.

### SILVER MINING IN INYO COUNTY.

In speaking of some of the silver mines of Inyo and of its encouraging outlook, the Independent says:

A number of miners and workmen in the employ of the Argus Range Silver Mining Company, at State Range, are now here and at Lone Pine. A big pay-day has occurred, in which the Company settled up all claims for labor and materials to date. The mill is close to completion, and the workmanship is reported to be first-class in every respect. Good miners, well acquainted with the properties, say that there are about 1,000 tons of milling ore on the dumps ready for working. Altogether, it is the most encouraging outlook for a big operation which this county has ever experienced.

Mr. Thompson has recently made some new discoveries in the old Cuervo mine, which is situated but a short distance to the north of and on the Defiance belt. By running a tunnel 250 feet in length, he cut the ledge at the depth of 250 feet, encountering an entirely different class of ore from what he found on the surface, and in paying quantities. The ore is a black, brittle sulphuret of silver, carrying zinc, being almost identical in character with that of the Indian Queen mine near Benton. The assay value is from \$300 to \$400 per ton, and would be pronounced a profitable base milling ore, to be worked by a roasting or milling process. This would lead one to suppose that in sinking upon the Defiance or any other mine in that belt, a change of ore will take place, and as the biser ores disappear rich sulphurets will take their places.

### SHEEP INDUSTRY.

The San Luis Obispo Tribune says that the sheep-growing interest of San Luis Obispo county is an important one, and is growing rapidly as shown very clearly by the figures of the Southern Coast Railroad. That road extends now from Port Harford to Los Alamos, a distance of 64 miles, and yet it is likely that between 20,000 and 30,000 head of sheep will be gathered along that area within the next two or three months, and shipped to San Francisco by the way of Port Harford. We have been informed that there are now at Los Alamos and Nipomo some 4,000 head awaiting shipment.



## HOME MANUFACTURES.

All history will vindicate the statements that exclusively mining and agricultural countries are usually poor and dependent, that the production of the raw material from the fields, forests, or mines is not the productive wealth that builds up towns and cities, of at least the kind that most greatly benefits the trading and wage-receiving classes. It is a kind of wealth which stands in pools, and does not spread out over the whole country and make the wilderness and solitary places glad, and the desert rejoice and blossom as the rose. It does not thrill out electricity the social, educational, and material interests of the country so thoroughly as to cause all parts to pulse with life and health. The raw, bulky, heavy material goes abroad at low rates, and returns as the product of skilled labor, at high rates. The difference between the price of the two commodities is the loss sustained by the manufacturing producer, and no people can claim to be well on the way to the highest prosperity who are content to be vegetable growers and mariners, the producers of raw material, wholly dependent upon the capricious and fluctuating prices of the foreign purchasers and manufacturers for the necessities and comforts of life.

We study the future in the light of the past, and what home manufactures have done for other nations and States, we may safely calculate the yield to do for California. We need only the example of our English ancestors. Though England is first known to history by the efforts of the Phoenician navigators to obtain the products of her mines, and although her pastoral and agricultural wealth chiefly attracted the Roman conquerors, still England never emerged as a first-class power in Europe until she had learned to manufacture her own productions. Then the island became a busy hive of industry and wealth. England exports no raw material, and what is the consequence? The whole land shakes with machinery, and her sea power is our long counter, where she trades with the world, buying the crude material, and selling the refined, and putting the difference into her pocket. Home manufacture has largely been the recuperative power of France, Prussia, and Holland, after being prostrated by long, devastating wars. These countries have steadily grown rich—have money to loan and invest in great public enterprises—while Russia, whose exports consist chiefly of the raw material, is one of the poorest nations of Europe, considering her extent and resources. Home manufactures made New England, with her thin soil, granite hills, and rough climate, rich and self-reliant, while the sunny South, with a fertile soil, a delicious climate, but exporting all she raised, languished in poverty. But the claim of a new era of prosperity in that fair clime is evidenced by the fact that her capital is beginning to whiz and whirl in her houses and syndicates.

We need only study what the mining products, the coal measures, and a system of careful agriculture combined, have done for the political and material prosperity of Great Britain to learn where the great secret of California's future prosperity lies if duly appreciated. There is no State in the Union that possesses so many marked advantages for building up a large manufacturing industry. We have wood, coal, and petroleum abundances. The out-door laborer rarely suffers from heat or cold. The ice never plagues the milk-wheels, and the path to the shop or factory is never blocked with snow. Then nearly all the staples, which constitute the same material, can be produced with the greatest ease, and in the largest quantities. The soil and climate are adapted to an almost endless variety. Anything in the line of wool, grain, wool, cotton, silk, California can produce of the best quality, and as cheap as the most favored country in the world. There is no reason, then, why we may not manufacture, at least four fifths of our present importations, and lay the foundation of an export trade, that will whiten the Pacific with the sails of our commerce.

There is already a great demand for our wooden goods, many miles reporting it impossible to fill their orders, and yet the bulk of the woodwork is still shipped East. Last year, California flour went to Great Britain, Germany, China, Japan, Central America, Australia, British Columbia, Mexico and the Pacific islands, and everywhere at good profits to the shippers, and yet, the most of our wheat still goes in the sacks to foreign countries. Now, any portion of this raw material which we can manufacture to export, is just so much added to the wealth and prosperity of the State.

Home manufactures made England the richest and most powerful nation on the globe! Home manufactures made New England the leader of a mighty republic! And home manufactures may make California the commercial empire of the Pacific Coast.—*Pacific Rural Press.*

## GOOD PROSPECT AT THE HARTERY MINE.

The appearance of the Hartery mine has improved decidedly of late, and the indications are that a fine chute of ore is being opened upon the first south level below the drain tunnel. The ledge in that direction is fully two feet in width, and the crushings taken out recently by the tributors have been very good. Yesterday there was a clean-up of 30 loads of rock taken out by Ryan & Co., which yielded \$42 per load, excluding the sulphurates, of which there were two tons. Two previous crushings were taken out from this level, the first of which yielded \$17, and the second \$26 per load. Another party of tributors have cut 10 loads of rock which is equal in appearance to the best crushing made. These results are so encouraging that more tributors will soon be put in the mine, and operations will be prosecuted actively.—*Crane Pathy Union.*

Subscribe for THE RESOURCES OF CALIFORNIA.

## PLANTING WALNUT TREES.

We print the following article from the Chicago Tribune, which is not at all exaggerated; and what is more, the walnut seems to be specially adapted in the Sacramento valley. It has a tap root, and after it once gets started will stand almost any amount of drought. It is the habit of some people to say that all this is "good enough on paper," but it has worked out all right wherever tried. It costs nothing to try it:

Mr. C. B. Wilson drove me out to his farm to-day to see some black walnut trees. Said he: "These trees were planted from the seed twenty years ago. I saw them planted." I measured them, and found they were sixteen trunks through. They would saw into lumber a foot of clear black walnut boards and then have the top, limbs, and stump left. The stump itself would sell in-day for five dollars, to be secured into veneers. The boards would be worth \$30. "What could you sell these trees for to lumbermen as they stand?" I asked. "I could sell them for \$25 per tree, and ten years from now they will be worth \$50." From these facts I came to this conclusion: A black walnut tree will pay \$1.25 per year for the first twenty years. A thousand of them will pay \$1,250 per year. Now, every Illinois farmer has it in his power to make more money off a row of black walnut trees around his farm than he can make on his farm if sowed in wheat. How can he do it? This way: A farm of 160 acres would be 10,560 feet in circumference. Now, plant walnut trees four feet apart all around it, and you will have 2,640 trees, which will be worth \$25 apiece in 25 years.

Again, a farmer can set all his sloughs, low places, and all hog-pastures in black walnuts. Two thousand handsome walnut trees, growing on a farm, worth \$25 in twenty years, would not interfere with the farm at all. Orange raising in Florida will not pay half so well as black walnut raising in Illinois. "How should the black walnut be planted?" I asked Mr. Bates, a nurseryman at Whitehall, Ill. "The easiest way," he said, "is to strike the ground with a common hammer in the fall, make a round hole two inches deep, and drop the walnut in. It will cover itself with leaves and dust. The debris over the hole will be so light that the sprout will have no trouble in finding its way out." "What would you do after they come up in the spring?" "I'd go around and put a shovelful of sand-in, tan-bark, gran-chaff, or straw around each sprout. This will keep the roots damp, and kill the grass or weeds around the roots. A boy could plant 1,000 trees in a day in this manner. I'd plant them in rows as thick as I needed them, and then thin them out."—*Chicago Sun.*

## THE POSSIBILITIES OF FORTY ACRES.

"What can be done with 40 acres" was the title of an article written for the *Gazette* a time ago. The writer, after quoting the income of several fruit-growers, to establish a fair average, says:

Now let us return to our 40-acre lot. Reserve two acres for a house, garden, chicken yard, and the necessary out-buildings. Set out twenty acres in grapes, and divide the remaining eighteen acres equally between oranges and olives.

1. At the end of three years the grapes will bring \$1,000 if sold raw to the wine-makers, and at least \$4,000 if turned into raisins, at a profit of \$200 an acre, which is about twenty per cent, lower than in case (a) mentioned above, and 54 per cent, less than the profit in case (b).

2. At the end of three years the olives will be bearing largely, and bringing in a profit of not less than \$500 an acre, which, in nine years, the trees being then in full bearing, will be at least \$1,000 an acre.

3. At the end of ten years—or at most twelve—the oranges will clear \$500 an acre.

Combining these profits we have:

Raisins, 20 acres, @ \$ 200 per acre . . . \$ 4,000  
Olives, 9 " @ 1,000 " . . . 9,000  
Oranges, 9 " @ 500 " . . . 4,500

Total . . . . . \$17,500

This total is made by taking amounts per acre very much less than the actual receipts of well-known persons—fully one-half less in the case of oranges and olives; but in order to allow for any possible misadventure, let us reduce the estimate still further by one-third, and we shall still have a total of \$11,666 as the average annual profit from and after the tenth, or at least the twelfth year.

At the full rate of profit made in case (a), the return in the third year from the twenty acres of grapes would be \$7,100, and taking the low rate of \$200 an acre, it would be \$4,000, or one and one-half times the amount spent in purchasing the whole 40 acres, supposing the price to be \$75 an acre.

Taking the orange and olive profits at the rate given by the receipts of the gentlemen quoted, we have, at the end of the above period, an annual income from the 40 acres as follows:

Raisins, 20 acres @ \$ 370 per acre . . . \$ 7,400  
Olives, 9 " @ 2,000 " . . . 18,000  
Oranges, 9 " @ 1,000 " . . . 9,000

Total . . . . . \$34,400

If this were regarded as interest at the rate of ten per cent, per annum, it would represent a capital sum of \$344,000.—*Insistent Gazette.*

## FRUIT VS. WHEAT.

Indications point to the conclusion that the time is not far distant when the whole of the agricultural districts of Southern California will be almost entirely given up to the cultivation of fruits and the vine. This industry is certain to supersede the production of wheat, for the simple reason that wherever tried it is found more profitable. The raising of wheat is yearly becoming less and less remunerative; indeed, only in the event of failure of crops in large producing districts, or increased demands, created by war, or some like unexpected cause, wheat cultivators receive but little in the shape of profitable return for their labor. The climate and soil of the southern half of this State, and in some of the more northern districts as well, is particularly favorable to the successful cultivation of all classes of fruits. In time, we believe fruit cultivation will be the principal industry of California agriculturists.—*San Benito Advance.*

## STOCKTON

*Business College*

F. R. CLARKE, Principal.

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the Year. Tuition is less than on last usual course. Excellent board \$10 per month.

## COURSES OF STUDY:

Full Business Course, Full Normal Course,  
Teacher's Course, Book-keeping Course,  
Academic Course, Penmanship Course,  
Languages, Special Courses,  
Telegraphy

The COLLEGE JOURNAL, containing full particulars sent postpaid. Address F. R. CLARKE, Stockton, Cal. P. O. Box 15.

FIRE AND MARINE  
INSURANCE AGENCY

OF

HUTCHINSON  
& MANN,

Nos. 322 and 324 California Street  
and 302 and 304 Sansome Street,

## San Francisco.

## Agents for The

Agricultural Insurance Co., New York,

\$1,521,630.

Confiance Ins. Co., Paris, France,

\$6,835,298.

Fire Ins. Ass'n (Limited), London, Eng.,

\$1,573,291.

Grand Insurance Company, Philadelphia,

\$1,208,645.

New Orleans Ins. Ass'n, New Orleans,

\$578,216.

St. Paul F. & M. Ins. Co., St. Paul, Minn.,

\$1,048,673.

Standard Fire Office (Limited), London, Eng.,

\$1,300,000.

Tontomb Ins. Co., New Orleans,

\$118,045.

## MARINE.

The London and Provincial Marine Insurance Company, London,

\$6,278,362.

La Fourche Marine Ins. Co., Paris,

\$2,250,000.

Capital Represented . . . \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. C. CHAMBERS,

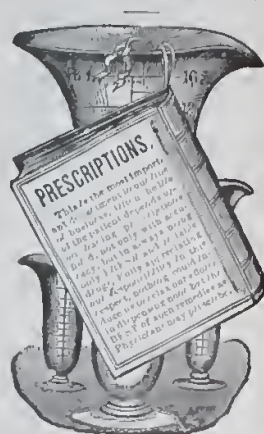
Special Agent and Adjuster.

**\$72** A week made at home by the instructions. Best business now before the public. Capital and needed. We will start you. Men, women, boys and girls wanted everywhere to work for us. You may work in spare time, or give your whole time to the business. No other business will pay you nearly as well. No one can fail to make money by this. We are not a company. Only one in all and terms free. Money made fast, easily and honorably. Address, Truck & Co., Augusta, Maine.

JAMES G. STEELE & CO.,  
Druggists and Manufacturing Chemists.

RESPECTFULLY CALL ATTENTION TO THEIR NEW ARRIVALS OF

Foreign Perfumery, Cologne, Scented Toilet Soaps, Hair, Tooth and Nail Brushes, Combs, Hair Oils, Pomades, Face Powders and Cosmetics, Sponges, Patent Mouthwashes, Etc., Etc.

JAMES C. STEELE & CO.'S  
Palace Drug Store,  
PALACE HOTEL.

635 Market Street, - - SAN FRANCISCO.

W. T. CARRATT'S  
BRASS AND BELL FOUNDRY,  
SAN FRANCISCO.

MANUFACTURER AND IMPORTER OF  
Church and Steamboat BELLS and GONGS.

BRASS CASTINGS of all kinds,  
WATER GATES, GAS GATES,  
FIRE HYDRANTS,  
DOCK HYDRANTS,  
GARDEN HYDRANTS.

A GENERAL ASSORTMENT OF ENGINEERS' FINDINGS

Hooker's Patent  
CELEBRATED  
STEAM PUMP

"The best and most durable in use. Also a variety of other PUMPS

FOR MINING and FARMING purposes

Root's Blast Blowers.

For Ventilating Mines and for Smelting Works.

HYDRAULIC PIPES AND NOZZLES

For Mining Purposes.

CARRATT'S IMPROVED JOURNAL METAL

— IMPORTER OF —

IRON PIPE AND MALLEABLE IRON FITTING

ALL KINDS OF

SHIP WORK & COMPOSITION NAILS

AT LOWEST RATES.

THOS. PRICE'S  
ASSAY OFFICE  
AND CHEMICAL LABORATORY.

524 Sacramento Street, San Francisco.

DEPOSITS OF BULLION RECEIVED, MELTED into bars, and returned made in from twenty-four to forty-eight hours.

Bullion can be forwarded to this office from any part of the Interior by express, and returned made in the same manner.

Careful Analyses made of ores, metals, soils, waters, industrial products, etc. Mines examined and reported upon. Consultations on chemical and metallurgical questions.

**REST** And, life is sweeping by, go and dare be from you die, something mighty and sad. Time leave behind to come a time. \$66 a week in your own home. \$5 initial fee. No risk. Everything new. Capital not required. We will furnish you everything. Many are making fortunes. Let this make as much as you, and boys and girls make great pay. Remember, if you want business at which you can make great pay all the time, write for particulars to H. WALSH & CO., Portland, Maine.



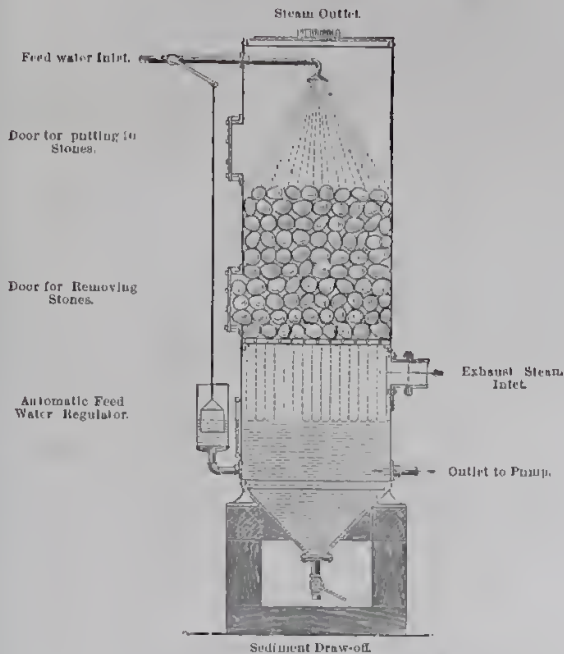
**LLEWELLYN FILTER-HEATER,**

Patent Issued Aug. 12, 1879, Re-issued Aug. 10, 1881.

For the Prevention and Removal of

**STEAM BOILER INCRUSTATIONS**

WITHOUT THE AID OF CHEMICALS.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.

Further particulars with full descriptive circular and price list can be obtained at the office of the

**LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,**

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufactory, Columbia Foundry, 133 and 135 Beale Street.

**The California Lloyds****UNION****INSURANCE COMPANY**

OF CALIFORNIA.

THE CALIFORNIA LLOYDS

(Established in 1861).

**FIRE AND MARINE**

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 416 and 418 California St.

Agencies in all the Principal Cities of the United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary. O. P. FARNFIELD, General Agent. GEORGE T. HOEHN, Surveyor.

J. F. FARNWORTH, M. T. GREWER

**M. T. BREWER & CO.,**

Nos. 30 and 32 J Street,

SACRAMENTO, - - CALIFORNIA

Commission Merchants & Wholesale dealers in Foreign and Domestic Goods and Dried Fruits, Produce, Honey, Nuts, Garden and Flower Seeds. Please give us a trial. 30 and 32 J Street, Sacramento, Cal.

**WISE** people are always on the lookout for chance to increase their earnings, and in time become wealthy; those who do not improve their opportunities remain in poverty. We offer a chance to make money. We want men, women, boys and girls to work for us right in their own localities. Any one can do the work properly from the first start. The business will pay more than ten times ordinary wages. Expensive outfits furnished free. No one who engages fails to make money rapidly. You can devote your whole time to the work, or only spare moments. Full information and all that is needed sent free. Address, Bryson & Co., Portland, Maine

**Globe Iron Works Co.****FOUNDRY,****MACHINE SHOP,****and FORGE.**

Manufacturers and Repairers of all Kinds of

**MACHINERY AND IRON CASTINGS,****Hoisting and****Mining Machinery,****LOCOMOTIVES.****Portable, Stationary and Marine Engines.****BISHOP'S ECONOMIC MINING PUMP APPARATUS,**

Which does away with Combruns Pump Rods, V Boles and Balance Boles, operating equally well in shafts or inclines, admitting of deflection into distant workings. Ciren are furnished free, upon application.

AND

**MINING HORSE-POWER AND QUICKSILVER FEEDERS.**

SPECIALTIES.

**PATENT AIR COMPRESSORS.**

222 and 224 Fremont St.,

Between Howard and Polson

San Francisco.

**A VISIT TO REDLANDS**

During the recent Press Excursion to Southern California, the writer and several others took occasion to visit San Bernardino and the Redlands Colony. The tract known as Redlands consists of about 2,000 acres, and derives its name from the character of its soil. Situated at the base of a spur of the Sierra Nevada, with a gentle slope westward, at a general elevation of several hundred feet above the San Bernardino valley, the land is within the warm belt, and, of course, comparatively free from frost. This fact was fully exemplified during the cold and frosty weather of January and February last. While the frost was very severe and did much damage in some portions of that region the Redlands were almost entirely free from such a visit. The soil is remarkably well calculated for the cultivation of the orange, grape, etc.

Its elevation, moreover, renders it specially desirable as a place of residence. This tract is not only favored with the general healthfulness which prevails everywhere along the mesa lands which flank the Sierra Madre, but it is also especially desirable from the magnificent outlook which it affords over the valley of San Bernardino, and for 40 miles down San Gabriel valley. Even the famed Sierra Madre Villa has no advantage in this respect over the hotel at Redlands, from the windows of which we enjoyed one of the finest prospects of mountain, valley and vineyard which it was ever our fortune to look out upon.

While there we took occasion to look around generally upon the varied improvements going on. We found over 70 owners upon the tract, nearly all of whom were making improvements, either in plowing, planting or building. The land is mostly held in small tracts for homesteads, although there are quite a number of more extensive tracts being improved. About 500 acres will be planted in trees and vineyards the present year. The water system is, to all appearances, most perfectly and permanently constructed, and operated upon a plan highly favorable to land purchasers, the water rights being conveyed with the land; a certain number of inches of water accompanying a given number of acres of land. A very superior class of purchasers are going into the settlement, from which fact important social advantages will be derived.

One year ago there were but three houses in Redlands; to-day there are twenty already established, and a railroad station with a side track land within two and a half miles of the center of the settlement. A fine church and school have also been erected near by, and telephone connections have been made with San Bernardino, Colton, Elizavinda and Lugonia. It would be difficult to find another such instance of rapid improvement within the bounds of any agricultural district in the State.—*Cor. Rural Press.*

**ONE SUCCESS WITH BEET SUGAR.**

A writer in the New York Tribune, who recently visited this State, furnishes that journal with the following, concerning the beet sugar interest:

It is gratifying, among the wreck and ruin of attempted beet sugar enterprises in the United States to know that one has paid a profit for three consecutive years, and shows no sign of exhausted vitality. The Alvarado factory of the Standard Company, in California, made, during the first season, ending May, 1,391,638 pounds of refined sugar, 24,167 pounds of crude, and 111,794 gallons of molasses from 11,229.91 tons of beets, or more than six per cent. of the weight of the beets in sugar, in addition to the molasses. The expenses were \$112,681, and the receipts \$158,617, leaving a comfortable profit of \$45,936. This result was obtained notwithstanding the fact that the molasses brought out about eight cents per gallon, which, with investment in suitable machinery, might have been utilized at a much larger profit. Our Maine friends would not grow beets at five dollars per ton, but these cost only an average of \$4.29. The average yield was about fifteen tons per acre, worth \$63.45. The heaviest items of expense were: beets, \$17,552; coal, \$29,867; labor, \$18,932. About two-fifths of the entire cost was for beets. A boiler explosion increased expenses \$4,000; lime, coal oil, lime, acid, light, freight storage, drainage, commission, interest, etc., made up the remainder. A single success continued for five years, will be likely to give an impetus to the beet sugar movement which no subsequent failure can stay.

**ABOUT ORANGE TREES.**

While in Riverside, we were shown what is supposed to be the largest orange tree in Southern California. The tree is on Mr. Beers' place, is fifteen years old, about eight inches in diameter and eighteen feet high. At present, it is loaded with a fine crop of 4,000 oranges, which, at the prevailing prices, is worth over \$70. A valuable tree is that. We also gathered from his place, well preserved ripe grapes, which had retained their form and flavor in a remarkable manner.—*San Bernardino Indis.*

**MOUNTAIN RESERVOIRS.**

In speaking of the necessity and possibility of the construction of mountain reservoirs for the storage of water for purposes of irrigation, the *Pomona Times* has the following:

It is self-evident that Southern California must sooner or later adopt some such means as will place the agricultural and horticultural industries in entire independence of the annual rainfall. To depend for irrigation upon the flowing streams is to place the productive interests of the country upon a very uncertain basis. In the first place, the amount of water during the driest months of the summer is, as a rule, much smaller; and in the second place, some of the most extensive and fertile portions of the agricultural territory is not situated so as to be subject to irrigation from such streams. The day is not far distant when some method will be devised for supplying those large areas of fertile lands with water necessary for irrigation. The practicable way is by the construction of storage reservoirs in the mountains. Their practicality has been thoroughly demonstrated in numerous instances, and they are no longer an experiment. In Mexico they are numerous and have been in use for hundreds of years. Ranches of immense extent are watered entirely by this means and the supply is never exhausted. In many cases, the water from them is conducted through cement ditches a distance of a hundred miles or more to supply large tracts of otherwise valueless lands. In our own State we cite the instance of the reservoir near the city of Vallejo, which is constructed in a large basin in the hills near that city, and from which a valley of large extent, lying below, receives its entire supply; the city of Vallejo receives all its water from the same source as does also Mare Island and all the public works thereon situated, and a scarcity of water has never been reported. In the great majority of localities, in our own county at least, the expense attached to the construction of these storage reservoirs would be but a trifle compared to the immense benefits that would result therefrom. We could cite to numerous places where the expenditure of a few thousand dollars would insure an amount of water sufficient for all the lands for miles around. We are satisfied that if the amount of money which has been spent in this county, in the last few years, in trying to obtain a large supply of water from a small stream, and in litigation over prior water rights, had been expended in the construction of storage reservoirs, there would not be an acre of agricultural land in the county but could be flooded with water. We regard the water question as one of easy solution if it is only taken hold of in the right manner, and the undertaking is not as great as many are inclined to believe.

**TUOLUMNE COUNTY'S FRUIT INTEREST.**

An old citizen, who is thoroughly acquainted with the productive capacity of the soil of this county, writes as follows to the *Independent*:

There is a noticeable feature in one of the branches of farming in this county, which is rapidly taking the lead of all the different branches pursued, and that is the cultivation of fruit for which the soil is much better adapted than to the cultivation of cereals, or any other farm production, as has been thoroughly demonstrated in the past; therefore, the reason why farmers are turning their attention more particularly to this branch is, it promises, in the near future, better returns, which may be written as a well-established fact. It remains to be seen if, from the close observations on which we base our predictions, we have miscalculated the real importance it bears in relation to other branches. It is to be noticed throughout the county that the farmers are beginning to realize the importance of this growing industry, judging from the new orchards that are springing up, and the renewing of old orchards with the choicest variety of trees. Viticulture is also being revived. Vineyards which have been sadly neglected in years past, are now receiving proper attention from the viticulturist. Yet, viticulture is the fruit interest of this county, at the present time, compared to what it will rank in that particular at no distant day? In making a rough estimate, we find there are over 200,000 acres of forest land embraced in the boundaries of this county which is known to be better adapted to its character—in fact, the best in the State to the production of semi-tropical fruits, than nine-tenths of the land at present under cultivation (meaning orchards and vineyards); and there are, of orchards and vineyards, not exceeding 10,000 acres in the county. Thus, it may be readily seen, the advantages the county offers in this one industry alone. There is no argument that can be produced that will disprove the above statement.

**HARVEST HANDS.**

The farmers, says the *Yolo Democrat*, are already beginning to express fears of a lack of harvest hands this year. The wheat crop of California is thought to be in excess of its year, and the supply of labor is not as great as it was then.



## GOOD TIMES AHEAD.

In speaking of the good times, in the near future, a writer in the *Butte Herald* recently said:

The people of California, and especially those in the northern part, have every reason to look ahead for good times. The late rains have insured abundant crops, and good crops this fall can not fail to bring good prices. Every pound of California fruit is worth to the farmer. The fruit crop, which last year was one-third in value to the about crop, will be this year the best ever known. The present low rates on the S. P. R. R. for fruit, particularly the citrus fruits, open an immense market for all the southern part of the State can produce. This leaves us free, in the northern part, to grow large quantities of citrus fruits without fear of excessive competition. Whenever the California and Oregon Railroad is completed we will have a good market for any surplus we may raise. Our vines are each year attracting more attention, and bid fair to stand first in the world within the next two years. California silk is rapidly coming into notice, and will some day be a great industry with us. Land is increasing in value each year, and will increase still more rapidly when just assessments compel men, owning large tracts, to pay a fair tax on their land. We hope to see this the case during the present year. Rents have gone up nearly ten per cent. in San Francisco, and that is a good indication of the prosperity of the State. Not less than 25,000 visitors will come here from the East this season, and allowing each one to spend only \$50, we have \$1,250,000 left in the State. These visitors will do much more than have money. Some of them will settle here; most of them will have much to say, on their return East, of our climate, our soil, our productions and our room for millions of settlers. These will but act as an advance guard of the hundreds of thousands that will come here to be permanent residents. Mines of coal, clay and iron are being opened and worked, and these are mines that will not be exhausted in hundreds of years; will do no damage and will cause no litigation. To us everything looks favorable for California. We can see no reason why our citizens should seek other States for homes. Within the next ten years we believe the people of Northern California, and especially those in the Sacramento valley, will realize that we have the garden spot of the world for a home.

## MODOC COUNTY.

There are many people living in the older settled portions of California who, although frugal and industrious, cannot in the nature of things ever expect to own an acre of land so long as they remain where they are; a farm is within reach of the wealthy only. Almost all we receive letters of inquiry from those who wish to secure farms and homes. It would be unfair to deceive these people; whatever we have to say in regard to Modoc, now or hereafter, will always be the unvarnished truth.

There is a large area of Government land (open for settlement) in Modoc county and the northern portion of Lassen county. In Hot Spring and Surprise, and particularly in Goose Lake and Big Valleys there is Government land which would yield good crops. Those who have exhausted their homestead and pre-emption rights can still avail themselves of the Timber Culture Act. It does not pay to ship grain to the lower country, but a good home market is assured. The average price for wheat and barley is 1½ cents per pound—present price, 2 cents. All kind of live stock is raised at small expense and finds a ready sale. Stock usually requires some hay during a part of the winter, but not always. Modoc has the best summer range in the world (this is not extravagant language); plenty of grass and plenty of water. This is not a tropical climate; those who desire to embark in the orange and banana business will do well to keep clear of Modoc. We usually have snow in winter and some cold weather. Our winters are much milder than in Ohio, Illinois or Missouri. We know of no climate more healthy than this. Taxes in Modoc county are 2 per cent. We have good schools and good society. There is no better place in America for an industrious man to locate than in Modoc county.—*Idaho Argus*.

## FLOWERING PALM.

Mr. J. W. Gillette has a palm tree in his yard on Temple street which is a horticultural curiosity. He planted it about seven years ago, and the tree is already of good size and in full blossom. For a palm tree of this variety to blossom when seven years old is something unheard of before, and puzzles our local botanists and nurserymen. It may be that the old legend that the man who plants a palm tree will never eat of its fruits, is to be done away with in the "Glorious climate of California."—*Los Angeles Times*.

## LIMA BEANS AS A CROP.

The following, taken from the *American Agriculturist*, will be of interest to Californians: The Lima, the most popular bean among miners and market gardeners, is slow in finding its way into the gardens of farmers. The dry beans sell for several dollars a bushel, and the market has never been adequately supplied. Lima beans are easily raised, and yield so heartily as most other pole beans; and they continue to blossom and bear until killed by the frost. We know of no reason why they can not be made a specialty, like hops and tobacco, and grown on a large scale. They would require better soil and treatment than the common field bean, but as the price is three times greater, these could well be afforded. A rich gravelly or sandy loam suits them best, and the phosphatic manures are well adapted to them. On this kind of soil we have not found them to run too much to vines, even with heavy dressings of compost prepared from manure and stable manure. The vine is a strong grower, and requires abundant nourishment. The pods are formed quite thickly from the top to the bottom of the poles. They want the full benefit of the sun, and the rows running north and south should be four feet apart, and the hills four feet apart in the row. In planting are prefer to put the eye downwards, and not more than one inch deep. The first of June is early enough for this latitude. It needs frequent cultivation, until the vines shade the ground. This crop is well suited to farmers remote from cities and markets. The market gardener will not grow Lima beans to sell dry, because they are worth more in the green state, and he can sell all he can raise. But the farmer, however remote from the city, can market his whole crop in the winter, and he will profit for his labor.

## A PREDICTION.

The San Bernardino *Times* predicts that within the next ten years it will be very difficult to buy any desirable lands with water suitable for orange growing, in Southern California, for less than \$1,000 per acre. We believe the *Times* to be correct in its prophecy. Many persons think that the irrigable fruit lands of the Santa Ana valley are high now, but in much less than ten years from now they will see a vast enhancement in price. Look at prices of orchard land in Florida, from \$1,000 to \$3,000 per acre, and that in a climate that bears no comparison to ours for healthfulness. There are no swamps in our favored section, from which the deadly miasma is constantly arising, polluting the air, and being inhaled into the lungs of our people, as is undoubtedly the case in Florida. We have a section unsurpassed for healthfulness, and its adaptability for the production of fruit of all kinds, that attempts have been made to cultivate, has been sufficiently demonstrated.

We can raise better oranges than the Florida product, and our soil will produce the finest grapes, making raisins equal to if not superior to the Malagas, and wine of holy and flavor, with age, that cannot be excelled, and which is free from adulteration. Our valley produces as large, fine apples as can be seen in any country, apricots, peaches, pears, prunes, figs, and other fruits in perfection. The English walnut does well here, yielding profitable crops upon reaching the proper age. With our climatic advantages and unequalled soil productions it would be strange indeed if lands in this valley did not appreciate wonderfully.—*Santa Ana Times*.

## ARTESIAN WELLS.

From the *Fresno Republican* we take the following:

From a citizen of Fresno who visited Tulare City a few days since, we learn that there are now about thirty flowing wells within a few miles of that town in what is known as the artesian belt, inside of which no attempt to get flowing water has thus far failed, the wells varying in depth from 300 to 450 feet. A well in near being put down on the farm of Mr. Holmes, about a mile and one-half from town, and outside of the artesian belt. Property-holders here subscribed \$1,000 to assist in the experiment. At 450 feet blue clay was struck, which is considered a good indication, and at 325 feet a strata of blue sand and gravel was struck, which is considered a sure indication of flowing water at the bottom of the sand strata. The well-bore felt confident that they would find artesian water in a very short time. The establishment of the fact that artesian water can be had here would be worth many thousand dollars to the county.

## LITTLE CHUNK.

A fine chunk was shown us the other day. The specimen was from the Rough Diamond gravel mine in Chili Gulch, and was worth in the neighborhood of \$50. The Rough Diamond continues to maintain its reputation as a gold-producing property, and such finds are not infrequent.—*Chicoensis Chronicle*.

BROAD GAUGE.  
Summer Arrangement.

Commencing Wednesday, April 18, 1883, And until further notice, Passenger Trains will leave from, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
8:30 A. M.		6:40 A. M.
9:30 A. M.		* 8:10 A. M.
10:40 A. M.		9:00 A. M.
* 3:30 P. M.	San Mateo, Redwood, ..	* 10:02 A. M.
* 4:25 P. M.	.....and Menlo Park, ..	* 3:30 P. M.
* 5:15 P. M.		1:40 P. M.
6:30 P. M.		8:00 P. M.
11:15 P. M.		7:30 P. M.
		8:15 P. M.
8:30 A. M.		9:02 A. M.
10:40 A. M.	Santa Clara, San Jose and ..	* 10:02 A. M.
* 3:30 P. M.	Principal Way Stations, ..	* 3:30 P. M.
4:25 P. M.		8:00 P. M.
		8:15 P. M.
10:40 A. M.	Gilroy, Pajaro, Castroville, ..	* 10:02 A. M.
* 3:30 P. M.	Salinas and Monterey ..	6:00 P. M.
10:40 A. M.	Hollister and Tres Pinos ..	* 10:02 P. M.
* 3:30 P. M.		6:00 P. M.
10:40 A. M.	Watsonville, Camp Goodall, ..	* 10:02 A. M.
* 3:30 P. M.	Aptos, New Brighton, ..	6:00 P. M.
	Superior (Camp Capitola) and ..	
	..... Santa Cruz .....	
10:40 A. M.	Soledad and Way Stations ..	6:00 P. M.
7:40 A. M.	Monterey and Santa Cruz ..	8:43 P. M.
	(Sunday Excursion) ..	

\*Sundays excepted. Sundays only. Through train, Saturdays only.

Stage connections are made with the 10:40 A. M. Train, except Francisco Stage via San Mateo, and Pacific Company's S. Kings Stage via Santa Clara which connect with 8:30 A. M. Train.

SPECIAL ROUND-TRIP TICKETS.—At Reduced Rates.—to Pescadero, Monterey, Arroyo, Superior and Santa Cruz; also, to Gilroy, Pajaro and Paso Robles Springs.

EXCURSION TICKETS.—Sold Saturdays and on Sunday mornings—good to return on Monday.—to Santa Clara or San Jose, \$2.50; to Gilroy, \$4.00; to Monterey or Santa Cruz, \$5.00, and to principal points between San Francisco and San Jose also to Gilroy Hot Springs, \$6.00.

SUNDAY EXCURSION TICKETS.—To either Monterey or Santa Cruz, and return, \$3.00.

TICKET OFFICES.—Passenger Depot, Townsend street, and No. 2 New Montgomery street, Palace Hotel.

A. C. BASSETT, Superintendent. H. R. JUDAH, Asst. Pass. & Tkt. Agt.

AT SOUTHERN DIVISIONS. For points on Southern Divisions and the East, see C. P. R. R. TIME SCHEDULE.

OCCIDENTAL AND ORIENTAL  
STEAMSHIP COMPANY

## FOR JAPAN AND CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 2 P. M.,  
YOKOHAMA & HONGKONG

Connecting at Yokohama with Steamers for Shanghai.

Will sail from San Francisco.

COPTIC..... Saturday, May 5th.  
ARABIC..... Thursday, June 28th.  
OCEANIC..... Tuesday, July 10th.  
COPTIC..... Saturday, July 21st.  
ARABIC..... Saturday, September 15th.  
OCEANIC..... Thursday, September 27th.  
COPTIC..... Thursday, October 11th.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Obtain plans on exhibition and passage tickets for sale at C. P. R. R. Co.'s General Offices, Room 74, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 202 Market street, Union Block.

T. H. GOODMAN,

Gen'l Passenger Agent

LELAND STANFORD,  
President

THE NEVADA BANK  
—OF—  
SAN FRANCISCO.

Paid Up Capital ..... \$3,000,000  
Reserve (U. S. Bonds) ..... 3,500,000

Agency at New York.....62 Wall Street  
Agency at Virginia, Nevada,

ISSUES COMMERCIAL AND TRAVELERS' Credit.  
Buys and sells Exchange and Telegraphic Transfers.

This Bank has Special Facilities for Deal-

ing in Bullion,

SAN FRANCISCO.



## QUICK TIME AND CHEAP FARES

FROM

## AUSTRALASIA, CHINA &amp; JAPAN,

TO

## NEW YORK

AND

## LIVERPOOL

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

CENTRAL PACIFIC  
RAILROAD

CONNECTING WITH

## Union Pacific Railway

AT OGDEN, UTAH,

AND

SOUTHERN PACIFIC  
RAILROAD

CONNECTING WITH

Atchison, Topeka and Santa Fe  
Railroad,

AT DENING, NEW MEXICO,

AND THE

Galveston, Harrisburg and San  
Antonio Railroad,

AT EL PASO, TEXAS.

## THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway Lines in the Eastern States, for all the Cities of the

## UNITED STATES AND CANADA.

CONNECTING AT

## NEW YORK

With the several Steamer Lines to

## England, France.

AND ALL EUROPEAN PORTS.

## Silver Palace Sleeping Coaches,

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience in the Passenger while en route—combining the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable cushions, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Patrons. Children under Twelve years of age, Half Fare. Under Five years of age, Free.

100 pounds of Baggage per full Passenger free. 50 pounds of Baggage per half Passenger, free.

## PRINCIPAL TICKET OFFICE

AT THE

## OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

Where passengers, calling in person, can secure choice of routes and sleeping-car accommodations.

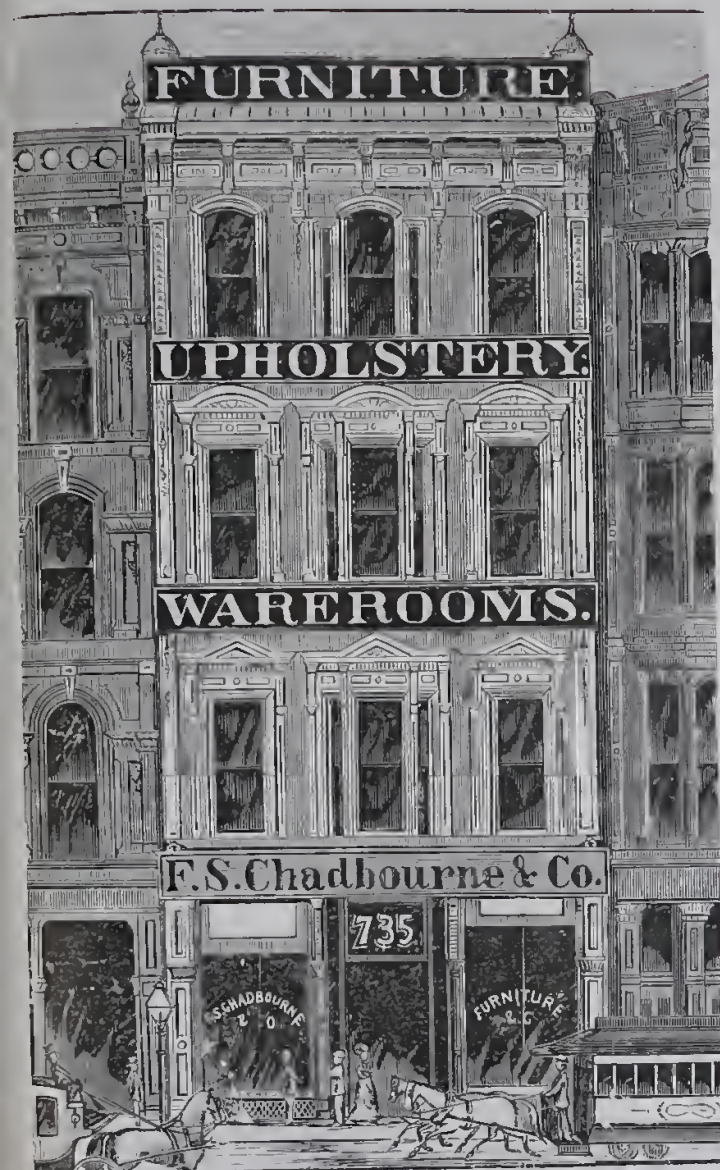
A. N. TOWNE, Gen. Superintendent. T. H. GOODMAN, Gen. Pass. & Ticket Agt.

SAN FRANCISCO, CAL.



F. S. CHADBOURNE &amp; CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



IMPORTERS, MANUFACTURERS,

AND—

Wholesale and Retail Dealers in

FURNITURE AND BEDDING

OF EVERY DESCRIPTION.

Chamber, Parlor, Library and Dining  
Suits,

IN AN IMMENSE VARIETY OF STYLE.

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish

Easy and Lounging Chairs, Etc.—Hotels and Private

Residences Furnished.—Designs Furnished

and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND VAN HILL STREETS, PORTLAND, OREGON

## THE SOUTH YUBA CANAL COMPANY.

A new ditch, which has been in progress of construction for several months from Quaker Hill to the Town Talk ridge, is now completed. A large reservoir has been built at terminus of the ditch, which encloses twenty acres of ground, and when filled, water will be at a depth of twenty feet. Discharge into it will be 200 inches per diem. Location of reservoir is high enough to supply every mine in Grass Valley district with water with which to run their pumping, hoisting and milling machinery. Water can be conveyed by lateral ditches to Union, Ophir or Osburne Hills, although most of the mines of the district have a lower elevation. The fall from reservoir to Idaho mine is 546 feet, but the company will build a reservoir of their own a little below the large reservoir. Engagements have been made so far to supply water power to Idaho mine in this district, and Marchie and Sherman mines in Nevada district; but the South Yuba Company will be prepared to contract to furnish all other companies that may wish to use this power, and there is every probability that all large companies will be quick to avail themselves of it, as it will be so much cheaper than the use of steam, and will cause such a reduction in expenditure that the advantage can not be overlooked. The outcome of the introduction of this water can not fail to be of the first importance to the Grass Valley and Nevada mining districts, as it will encourage the prospecting and development of quartz holes containing low grade ores, which heretofore have not been profitable at the current rates for milling and the cost of raising the ore by steam machinery. There is every reason to believe that the introduction of this water power is going to bring about a revolution in quartz mining here that will be of incalculable benefit to the business and to the promotion of the general prosperity. *Grass Valley Union.*

## GROWTH OF RIVERSIDE.

The following is the closing portion of an essay read by Mr. Garcelon, of Riverside, during the progress of the Riverside Citrus Fair:

Those who come to Riverside today have much to say about the high price of lands, and quote the \$25 per acre of ten years since, and wish they had that chance instead of having to pay \$1,000 to \$1,500 per acre to-day for improved places. Perhaps such persons do not realize what it was to come here far away from their privileges and enjoyments, and attempt something new, and failures and disappointments. Look at some of our old places to-day. Many vineyards and young trees show where disease, mistakes, and changes had to be made after years of care, and lessons which cost the money and labor. I hardly think there is much chance between \$300 an acre to-day, and \$25 in 1873. The present Riverside is a success. The Riverside of 1873 had many doubts; even in 1875 many lost both in her and left for other fields. Those who have stood by the enterprise in its weakness have been rewarded as they ought to be, in receiving fair prices for their improved lands. We are all looking hopefully forward to the time when we shall, after so many efforts in different directions, fully decide for what our lands are best adapted, and what will pay best as an investment. It is my hope, Mr. Chairman, that we have fully reached that position, and that now and hereafter we shall not be forced to make any more changes because of Irish divilments.

## A DAIRY REGION.

Southern California is fast coming into prominence as a dairy region. The grass crop is in any country one of the most important products of the soil. In a densely populated country like England, it is the most valuable crop that grows out of the ground. Cheese, butter, and milk are each gearing in favor as articles of diet, the first being the most common of all things used as food.

There are in this and adjoining counties many herds of well-bred cattle. Some of our Jersey stock will compare favorably with that of any country. It is now a well-settled fact that poor stock does not pay, that blood will tell in milk, beef, or mutton, as it does in all else. *Los Angeles Express.*

## PECAN TREES.

A *Times* reporter was shown two pecan trees yesterday, by a carriage and wagon manufacturer, brought in by a farmer living a few miles south of the city, to test their wagon material qualities. They are ten years old, are nine inches in diameter, and have yielded two crops of nuts. It is estimated that one acre of ten-year-old trees would bring a revenue of at least \$200, as carriage and wagon material, aside from the value of the nuts. They are a common tree in Kansas, Texas, and other trans-Mississippi States, and require but little care. The cultivation of this tree would doubtless prove a paying investment to the farmers of Southern California. *Los Angeles Times.*

## A LAND OF HOMES.

An enthusiastic resident of this city, whose hair is not yet touched with gray, remarked in our hearing the other day, that he expected to live to see the time when Los Angeles county, from the mountains to the sea, would be dotted with small homesteads of a few acres. He contends that Los Angeles valley, which embraced at least 1,200 square miles, though a territory of considerable dimensions, is small as compared with the large extent of country from which will come people who will desire to secure a home in this semi-tropical region. Following out the suggestion, we find that there is territory enough to allow 75,800 homesteads of ten acres each. Now, say the occupants of each of these ten-acre tracts number five, we should have a grand total of 384,000 people. Then, there are the residents of the towns. They would easily swell the figures to 500,000. It may be that the enthusiastic gentleman alluded to above has made the time too short for this grand result; yet, if he lives a half century he may see his predictions verified. The great tide of immigration at present is towards the Northwest. But this semi-tropical region is peculiarly fitted for small places, each of which is capable of sustaining a family. And its climate will cause it to be sought after by people of fortune who are not seeking to accumulate money, but are only hunting for a locality that is especially pleasant for invalids and those who would spend their last days amidst the most genial surroundings. This, as we have said, is an excellence a country for homes. Lands will continue to grow in value until they will reach a high figure per acre, which will have the effect of subjecting the whole to small subdivisions. When that time shall have arrived, the scene will be one of wonderful beauty, and the aggregate wealth of the country will be almost fabulous. *Los Angeles Express.*

## A FAMOUS ORANGE GROVE.

The editor of the *New Age*, of this city, in the course of his correspondence from Southern California, thus speaks of the Wolfskill orange orchard in Los Angeles county: We visited the well-known orange grove and fraternity of Wolfskill fame, which, for many years, has been the pride and wonder of Los Angeles. Situated within a mile of the town, it is visited by thousands annually. Formerly it was celebrated for grapes and vines, but more recently for its wonderful productiveness in oranges, lemons, and limes. A drive through the avenues laden with trees bearing golden fruit is a rare treat indeed.

This entire section of country is a perfect garden spot; and only since the introduction of water through ditches, for irrigating purposes, has it become appreciated. The San Gabriel and Pasadena locations, through this means, have been made to bloom at all seasons, and are now the choicest of homesteads, commanding the largest values in the vicinity.

## EVERGREEN MILLET.

Extraordinary things, apparently on good authority, are said about this new forage plant, evergreen millet. The seed resembles brown corn, somewhat, and produces a blade, as nearly as we can understand, like coarse grass but tender and making good hay. Once started it is said to grow on dry soils and in hot climates, and can be cut several times like alfalfa or can be pastured, and does not blight stock as alfalfa does; that its roots are many and nutritious, fine for the hogs to root among, because when bitten off each root starts again at each joint or eye. We received some seed from Prof. Sanders, of Sanders P. O., Fresno county, and sowed it nearly a month ago in very gravelly land and find some of it coming up before the rain. The seed is rather hard to start but, once started, propagation by roots is very easy. It naturally spreads rapidly. Our farmers should all try at least a little of it. *Lompoc Record.*

## THE GROWTH OF THE NUT PINE.

We find the following, by John Taylor, an old resident of Tuolumne county, in the *Rural Press*:

We note in your last issue something concerning shads and denuded hillsides. In California our hills can never be so denuded if I am not deluded in that belief. I have been living among the nut pines for 34 years. In that time I have seen the old trees cut down for charcoal, etc., and for every tree so cut down half a dozen young pines have sprung up, and attained goodly proportions. If a lover of nature were to visit our foot hills, he would find delightful groves of young pines, and the hillsides all covered by a luxuriant and healthy growth. I should judge the age of a nut pine to range from 40 to 80 years. The old trees are gradually dying off, year by year, so we can judge of the young growth from many years observation of their rise and decay.

THE RESOURCES OF CALIFORNIA is the best paper to send to your friends abroad.



## THE BEST FRUIT SECTION.

Our State is famous the world over for her immense production of gold; in the growing of cereals she ranks with the foremost; that she is to achieve even grander results in the production of fruits there is now every indication. Mining will be carried on in some parts of our State as a paying business for years to come, and the growing of grain in other portions will prove profitable for all time; but from our valley and foothill lands shall come the harvest of fruit that shall add to us a wealth of which early Californians never dreamed—a wealth of increasing value, the extent of which can only find a hint in the capability of industrious men and women. Enough has already been done to prove the fruit-growing qualities of our soil. Too much fruit can not be raised. All fruit growers of intelligence have that as yet the local supply has never exceeded the home demand, in reality, and that as our means of transportation increase so will the demands of our fruit multiply. And while foreign markets covet our gold, and demand our grain, they certainly cannot afford to slight our fruits. We have only to let it be known that the fruit is here, to open up a market for all that we can possibly produce. A demand for California fruit exists now in the Eastern States that will grow with the supply. Yolo, Napa, Los Angeles and Fresno counties have earned a reputation abroad for producing wines equal to those of France, while their raisins rival the famous product of Malaga. Canned fruits such as peaches, apricots, pears, plums and nectarines, produced in this State, are recognized as being equal, if not superior, to any other found in the markets of the world. It is a matter of record that in 1880 England alone secured all the exportable surplus of apricots obtainable on this coast. For the past three seasons our nurserymen have been unable to supply the demand for these trees, and the ruling price for this fruit has been from three to five cents per pound, raisers offering to contract for crops for a period of five years at the former figure. To grow apricots successfully it is necessary to secure a location where the climate and soil are peculiarly adapted to the nature of the fruit. No amount of artificial nourishment can result profitably where the natural demands of the tree are lacking. Some of the finest and most productive apricot trees in the State are to be found in Tulare county, and the fruit is equal in size, beauty and flavor to any that can be grown elsewhere. Peaches, plums and prunes appear to be in their natural home here, while apples, pears, etc., grow to almost equal perfection. Oranges and lemons have been successfully grown in this county, and it is worthy of note that the oranges sent from this county to the San Diego citrus fair in March of this year were awarded the first premium over all competitors, including Los Angeles, Riverside, San Gabriel and San Diego. We do not believe, however, that the growing of lemons and lemons will prove profitable here for the reason that they are not as hardy as the orange.

There are in this county small orchards of peach trees that have yielded regularly and heavily for many years past, but the people owning these orchards have been satisfied with having what fruit their own families could use, and have made no effort to make fruit-raising a business; not realizing that there is more actual profit in a 20-acre orchard than there is in an ordinary year in a grain field of five times the area.

The completion of the new southern route to New Orleans places us within easy reach of European markets, and we trust will stimulate the residents of our county to energetic efforts at fruit growing. To make a success of the business we will have to compete with other sections. California is certain to produce large quantities of fruit of first-class quality, and there is only one thing that can prevent her taking the lead in supplying foreign demands—that is carelessness in preparing it for market. Fruit must be thoroughly cured, skillfully packed and honestly measured. Our fruits are of choice quality. Nature has surrounded us with fertility of soil, desirable climatic influences, and our people are both industrious and intelligent. What, then, can prevent ours from taking her place in the foremost rank of fruit-growing counties in the State?—*Tulare Register*.

## RAILROAD BUILDING IN CALIFORNIA.

A writer in the *Argonaut*, who has traveled extensively in this State, furnishes the journal with the following interesting article:

The following memoranda concerning the railroads now in progress of construction in California, their length, and the character of the country through which they are being built, is obtained from official sources, and can be relied upon. The information is of interest to all, whether in city or country, whether agriculturists or business men. First comes the extension of the Oregon Branch of the Central Pacific Railroad: (1) The road from Redding to Bailey's (Lower Soda Springs) will be 60 miles in length. The line runs along the Sacramento river, closely following its high-water mark, through a rainy country, compelling costly construction and numerous crossings. The country back from the river rises into broken mountains, covered with brush and of but little value. Settlers are few, and engaged only in mining and stock raising. The minimum grade of this section is 70 feet per mile. (2) The road from Bailey's to Berryvale (or Sisson's) will be 13 miles in length. The line rises away from the river toward the summit, requiring above Berryvale a steady upgrade of 116 feet per mile. It follows the east side of the Sacramento canyon. The country is heavily timbered, fir predominating, and has but few inhabitants. (3) The road from Berryville to Black Butte Summit will be seven and four-fifths miles. It runs over bench lands, timbered and comparatively smooth, with occasional meadows, all of which are cultivated and occupied. Black Butte

end of the survey at Perry's Ranch, will be twenty-five and seven-tenths miles in length. For the first thirteen miles the road runs over rolling plains; the remainder is through a broken foothill country. Next is the Winters and Ukiah Railroad: From Vacaville (four miles from Eureka, on the California Pacific Railroad), the survey was commenced toward Clear Lake, distant, at the town of Lakeport, seventy miles. The survey has been completed forty-two miles. It runs through a mountainous country, although there are numerous small valleys suitable for grazing and cultivation. Next comes the Northern Division of the Southern Pacific Railroad. From San Francisco to Soledad the distance is one hundred and forty-three miles. From Soledad to the junction with the main line in Tulare valley the road will be one hundred and sixty-one and seven-tenths miles in length. From the junction on the main line to San Francisco, via Soledad, the distance is three hundred and four and six-tenths miles—via Martinez two hundred and ninety-one and four-tenths miles. The proposed road from Soledad to the junction with the main line in Tulare valley will run southerly for about sixty-four miles up the valley of the Salinas river. This valley contains some good agricultural land, with high hills on each side, affording pasturage. The line then turns eastward up the valley of the Estrada and San Juan creeks, crossing the coast range of mountains at an elevation of over seventeen hundred feet into the Tulare valley, across which it will run easterly for about forty-seven miles to the junction with the main line. South of Tulare lake the coun-

## UNPRECEDENTED PROGRESS IN VINE CULTURE.

It is safe to say that no country in the world has ever made such advances, in an equally brief period, as California, in the manufacture of wines and brandies, during the past ten years. In truth, it is little short of a miracle; a *d*, with a corresponding ratio of advance, this section will soon become a formidable competitor of the "pleasant land of France" in the production of wine and brandies of standard excellence. When we use this term we have, of course, reference to the wines sold in critical European markets by the French, vigorous. It really hardly stops short of the verities—the progress that has been made in Los Angeles county alone, during the time named, in the fabrication of notably fine wines. As to our brandies, they have always been excellent, when turned out from the stills of such men as Rose and Shorb. We have in our mind's eye to-day wines in the cask, which are not yet three years old, that will rival in quality the finest brands of the Rhine country and in which the proportion of alcohol is not over nine per cent. It must be borne in mind that, for a long time, it was doubted whether Los Angeles county could ever produce as light a wine as the excellent Riesling, of Spouma. As a matter of fact, we know of several vineyards of the Barget, remarkable for their bouquet, exquisite color and exhilarating qualities, which are four to five per cent. lighter than the best brands of Riesling which have been produced in Sonoma county. Nothing could show more strikingly, than a thing like this, the possibilities which lie ahead for Los Angeles

county in the immediate future. The capabilities of this county in the line of heavily bodied wines have always been conceded. Our Ports and Angelicas have been admitted to be without rivals in this State; and, with the age which guarantees following, the English connoisseur of heavily bodied wines, as into raptures over them. Gen. Beale, late United States Minister to Austria, and a *bon vivant* who has a reputation on both the American and European continents as a giver of exquisite dinners, has assured us that an old and well-known Los Angeles Angélica can not be told apart from the famous imperial Tokay of Hungary. When the celebrated violinist, Wilhelm, was in Los Angeles he expressed himself both surprised and delighted with the quality of our heavy wines; and, to prove his faith by his works, he shipped several pipes of them to his father, in Germany, who is the head of a very extensive wine-growing corporation in that country.

Allowing for the fact that both viticulture and viniculture are comparatively new interests in this State, it is established that we have already made phenomenal headway in this most reliably profitable of all pursuits. It is an event worthy of commemoration and reflection. At a similar ratio of progress we risk nothing in predicting that, before twenty years have elapsed, Southern California, which practically means Los Angeles county as respects wine to-day, will have developed brands of wine which will become as famous as that Falstaff of old which was drunk by the Pompeians when the lara from Vesuvius overwhelmed them; as the modern and Christian Lachryma Christi, of Italy, the Lattée and the Champagnes of France, and the Schloss Johannisberger of the Metterich estate in Austria. We have already equaled the famous Oporto. Taking the State as a whole, our advances have been as great in red as in white wines, the Zinfandel having far exceeded expectations as a claret. We are evidently just upon the threshold of most gratifying vinicultural achievements, while the results already accomplished and recorded are things to be proud of.—*Los Angeles Herald*.

## PETALUMA.

The prospects of Petaluma were never brighter. There has not been at any time in our history a greater demand for city and ranch property than there is right now. Business locations are also in good demand and difficult to get without paying out some one already established. The business portion of our city is gradually enlarging. Washington street and Western avenue are both looking to improvement, and property along them increasing in value.—*Petaluma Courier*.



IRRIGATING FLUME, RIVERSIDE, CAL.

Summit is on the ridge or divide between the waters of the Sacramento and Klamath rivers. (4) The road from Black Butte Summit to Shasta river (near Butteville) will be eight and two-fifths miles in length. The line descends into the Shasta valley, through land of a hilly rather than a mountainous character. The country is well timbered, being covered with pine and fir. The district is sparsely settled. (5) The road from Shasta river to the head of Willow creek will be thirty-three miles in length. The line runs through the Shasta valley, which is from ten to twenty miles wide. The land is mostly level, destitute of timber, and well adapted to stock-raising. Quite a number of settlers are located there, the chief industry being the dairy business. (6) The road from the head of Willow creek to the Klamath river will be two miles in length. The road, as surveyed, runs through a canyon, down a grade of ninety feet to the mile. The country is hilly, bare of timber, and contains but few settlers. (7) The road from the Klamath river to Fox's, on Cottonwood creek, will be eight miles in length. It runs over a good country, which is well settled, the principal business being farming and stock-raising. The district is bare of timber. The road from Fox's to the State line will be seven and one-fifth miles in length. The survey here passes up Cottonwood canyon, on a grade of 116 feet to the mile. There is some timber on the land, principally pine and fir. In the district there are a few valleys and hills, suitable for pasturage. The total mileage of this Oregon branch of the Central Pacific Railroad will be one hundred and thirty-nine and two-fifths miles. Next comes the San Joaquin Valley and Yosemite Railroad: The road from Berenda to the

try is low and swampy for a considerable distance, caused by the overflow of Kern river and Tulare lake. The agricultural land in the Salinas valley will require irrigation. When irrigated, as is the case with much other land in California, it becomes extremely productive.

## ORANGES WITHOUT IRRIGATION.

Mr. John Mitchell has demonstrated beyond any question that oranges of fine quality, flavor and size can be raised in Fallbrook without irrigation. Mr. Mitchell has an orange orchard of one hundred and sixty trees, planted in March, 1879—four years ago—from budded trees. They bore fruit in the second year, and to-day, you can see one hundred trees loaded down with an average, by count, of over two hundred oranges in each tree. Constant cultivation alone has done this work. Some malicious persons in the neighborhood of the orchard are trying to convey the idea that he has irrigated his orchard, which we know is false, for the reason that he has no means by which it could be irrigated. Call and see "old John" and his pleasant wife, who will show you their orchard with pleasure. If such oranges as these can be raised in Fallbrook, why not in other localities along the coast in the numerous protected valleys? Mr. Mitchell, by his energy and industry has demonstrated what can be done without irrigation. Constant cultivation beats irrigation, and a monument has been erected to industry, from which example many others should follow.—*San Luis Rey Star*.

Subscribe for THE RESOURCES OF CALIFORNIA.



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, JULY, 1883.

ESTABLISHED, 1870.  
Office—320 Sansome St., Balbeck Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM.**

Six Months, \$1.25—Postage Paid.

SINGLE COPIES, 20 CENTS.

ISSUED MONTHLY.

and south by Placer county. In width it is only from 8 to 20 miles. It is divided into nine townships, viz: Bloomfield, Bridgeport, Eureka, Grass Valley, Little York, Meadow Lake, Nevada, Rough and Ready and Washington. Nevada county has furnished more gold, and, at the present writing, has more of the precious metal hid away in its immense beds of gravel and quartz ledges than, perhaps, any territory of its size in the known world. Ever since the discovery of

planned on the immense gravel deposits that form the beds of extinct rivers, it is but proper that a description of these gravel deposits be given.

Throughout all north-eastern California, known as the gold-bearing gravel district (which embraces Nevada, Sierra, Placer, El Dorado, the eastern portion of Butte, Plumas, Amador, Calaveras and Tuolumne counties), these ancient river beds are known to exist. It is the opinion, of some of our geologists, that subsequent to the tertiary period

right angles with the present rivers that carry the water of the mountains into the valleys below. In future years, when the beds of these extinct rivers shall have been laid bare for miles, by the agency now being employed, then it will be possible to determine the exact course of the channels. Future developments may reveal channels that are yet unknown, and demonstrate the existence of both larger and smaller streams, that will change, materially, the theory at present held as to the



BIRD'S-EYE VIEW OF NEVADA CITY, CALIFORNIA.

## NEVADA COUNTY.

The Great Gold Fields of California.

Gravel Mines—Quartz Mills—Lumbering Interests, Etc.

[By the Travelling Agent of THE RESOURCES.]

In 1850 California was divided into 27 counties, Yuba, Nevada, Sierra and a portion of Placer being then called Yuba. On the 26th day of April, 1851, Nevada county was organized. It embraces 626,240 acres of territory, reaching west, from the Nevada State line a distance of 75 miles. It is bounded on the north by Sierra, west by Yuba

gold in California, Nevada county has furnished millions of dollars annually. The gravel mines were first discovered in 1849, and for a number of years thereafter their working was an easy and simple process. Men were known, in a few weeks, to return to their homes in the States, and other portions of the world, carrying from ten to fifty, and occasionally, as high as one hundred pounds of gold dust each. The discovery of the ancient river beds, near Nevada City, opened up a new class of mines, and required a much larger outlay, and more risk to work, than the river or ruvinous channels.

### Ancient River Channels.

Before describing the methods of mining em-

was the time when the main valleys of the continent were excavated by erosion. It was, probably, in this epoch that the deep-lying auriferous gravel was produced. The exact course and direction taken by these extinct rivers is as yet, to a large degree, a matter of speculation. The theory and exact time when the waters of these rivers were running in their channels is not given by scientists or geologists, but it was, no doubt, a long time previous to the time of "Jonah being swallowed by the whale."

The channels of these streams have been opened, in hundreds of places, in the various counties above mentioned, and it is pretty well determined that the general course of the streams is almost at

course and direction of these long extinct rivers. This county is one of the best

### Watered

In the State. The middle fork of the Yuba river forms the north and west boundary line between Nevada and Sierra counties, and the western line between this and Yuba counties. Poorman's creek, one of its tributaries, is in the northwestern portion of the county; Bear river and Big Dry creek are in the southwestern part, while Prosser creek is the extreme eastern part.

### Truckee River.

One of California's most sparkling streams, is the outlet of Lake Tahoe. This beautiful stream, if utilized, would furnish water power sufficient to



turn every spindle in the numerous manufactories of New England.

Nevada county's greatest charm is in the numerous beautiful lakes which are scattered throughout the county. The most noted of them is

#### Donner Lake.

The photographic view of this lake, which we present our readers, was furnished us by Mr. C. F. McLachen, the publisher of the "History of the Donner Party." Few people, who know anything of the early history of California, have not heard of the Donner party, many of whom perished here in the winter of 1846-7. We have read with interest, several times, this thrilling "Tragedy of the Sierras." From its pages we take the following:

"Three miles from Truckee, Nevada county, California, lies one of the fairest and most picturesque lakes in all the Sierras. Above, and on either side, are lofty mountains, with castellated granite crests, milie below, at the mouth of the lake, a grassy meadow valley widens out and extends almost to Truckee. The body of water is three miles long, one and a half miles wide and four hundred and eighty-three feet in depth. Tourists and picnic parties annually flock to its shores, and Bierstadt has made it the subject of one of his finest and grandest paintings. In summer its willowy thickets, its groves of tamarack and forests of pine are the favorite haunts and resting places of quail and grouse. Beautiful speckled mountain trout plentifully abound. A rippling breeze usually ripples and dipples its laughing surface, but in calmer moods it reflects, as in a polished mirror, the lofty overhanging mountains, with every stately pine, bounding rivulet, blossoming shrub, waving fern, and larch, above all, on the right, the clinging trail-like line of the snow sheds of the Central Pacific." Twenty-six miles north, through some of the grandest mountain scenery in the world, brings us to

#### Webber Lake.

Which lies at an altitude of 6,925 feet above sea level. The lake itself is nearly round, and, with the exception of an opening on the south, is surrounded by a frame work of wooded mountain tops. Less than a mile from the lake is Webber falls, with a tumble of 105 feet; nearer by, on the southeast side, is White Rock Peak, rising nearly 2,500 feet above the level of the lake, and at its foot another small body of water, called White Rock lake. Directly on the south is Meadow Lake Pass, with mountains towering on either side. Three thousand feet above the level of the sea stands the grim old sentinel, Webber Peak. A mile north, and 7,500 feet above the sea, is the

#### Lake of the Woods.

A lovely sheet of water entering about 45 acres; and further to the north, Observation Point, from which a distance of 300 miles can be seen, in fair weather.

There are a number of other beautiful lakes up in this region, among which we will name: English, Forrest Valley, Lake Sterling, Panther and Linsley.

#### Grand Scenery.

Having visited every portion of the great State of California, we are prepared to say to tourists and visitors to our wonderful country, that by stopping off at Colfax, on the C. P. R., and taking the Nevada county (narrow-gauge) Railroad to Grass Valley, a distance of sixteen miles, they will pass through some of the most romantic and exhilarating mountain scenery in the world, and visit the immense quartz-mills, and see the *modus operandi* of crushing, and other scientific, ponderous mining machinery, which has been invented by experienced men, and manufactured by the most skilled mechanics in the United States. It will richly repay any one to visit them, and I venture to say that this part of the visit will be valued more than anything that can be seen in all California. Four miles further north brings us to Nevada City, where twelve or fifteen mills are within bearing distance. We visited the

#### Providence Quartz-mill.

Considered to be the finest on the coast. It is a 40 stamp mill, driven by water power; the water is brought in iron pipes over the mountains, and has a fall of 391 feet. A brief description of these gold-producing works may not be out of place here, especially for the benefit of our many Eastern readers and tourists, who may want to see the finest, most complete and complicated machinery on the coast, yet running night and day as regular as clock-work, with scarcely any one to look after its labors. The mill is situated on the south side of Deer creek, about one and a half miles west from Nevada City, and located on the side of a mountain where the mine is. The ore is hoisted up out of the mine 1,100 feet, and dumped into the top of the mill, on to what miners call the "grizzlies," similar to a coarse coal screen, only this is made of strong iron bars, large enough to receive a car-load of quartz rock at a time. The fine quartz sifts through and the coarse passes into the rock breakers, where it is broken up fine; it is then dumped into the ore bins where it enters the self-feeders, which pass it into the batteries or stamps, 40 in number. After it is stamped small enough to go through a fine screen, it passes over electro silver-plated copper plates into the "Frue" concentrators, 10 in number. These

machines separate the sand from the sulphurets. The sand passes off into the stream below. The sulphurets are saved under the machines, where they are taken into the drying room adjoining. When dry enough they are put in large oval furnaces, 15x18 feet in size, built of brick, three stories in height, each story being about three feet. When thoroughly roasted they are taken into the cooling doors, where they are minutely and mixed, then put into large vats of 2½ tons capacity, where chlorine gas is applied. After the covers are put on the gas is turned on for about 60 hours; by this time the sulphurets are completely permeated. This changes the metallic gold into chloride of gold, which is now in liquid form; water is applied, and the contents of the vats are leached. The solution is then carried into other vats and there it is precipitated with sulphate of iron. This is cleared up once in six or eight days, when the precipitate of gold is melted into bars of from three to four thousand dollars each. After the gold is extracted, a similar process is gone through to extract the silver by using a solution of hydro-sulphate of soda, which gives a sulphide of silver; this is melted into bars the same as gold. Eighty tons of quartz are crushed every 24 hours, and from 90 to 100 miners are constantly employed in mining and hoisting the ore, while only five men are required in and around the mill, so systematically it is arranged. Natural gravitation is being brought into use from the time the ore is dumped on to the "grizzlies" until the gold and silver bars are taken out. One hurly-gurdy water wheel furnishes the power to run the machinery, with the exception of the hoisting works. It is the property of Walrath Bros. & Co., and is not for sale.

Near by is the Merrifield mine, which also has a 40-stamp mill, giving constant employment to 70 or 75 men; it has been in operation for 26 years. The shaft is down some 900 feet. This is also one of the best-paying mines on the coast.

Near this mine is the Mountaineer Mill and Mining Company's mills, which have been in operation a long time.

None of these mines show any indication of giving out, but are year by year becoming better paying properties. While San Francisco people have gone wild over mining stocks on the Comstock, and other mines throughout the country, the miners in Nevada county have quietly invested their money in the legitimate development of these mines, and they are, at present, the possessors of the finest and best-paying mining properties on the coast.

There are a large number of other mines in this vicinity that we might mention if we had the space to do so; in fact, the entire western half of Nevada county is almost an exclusive mining country. There are 331 surveyed mining claims located and recorded on the county books. Between Nevada City and Grass Valley are some very rich mines. The

#### Idaho Mine.

Near Grass Valley, is one of the leading mines on the coast. It is principally owned by John C. and Edward Coleman, under whose management it has paid dividends of nearly \$3,500,000. The total yield in gold has been about \$8,000,000. The running expenses of themine will be greatly reduced the coming season. The entire machinery is run, at present, by steam, which will be superseded by water power. The

#### Pittsburg Mine

Is located about one mile north of the Idaho, and the ore is of the same geological and mineralogical formation. This mine has been worked, at intervals, since 1851, and the total yield of gold is estimated at \$1,000,000. The property belongs to business men of San Francisco and Grass Valley. The company have a fine mill and all the requisites for working. There are from ten to twelve thousand tons of rock in place, averaging from \$25 to \$28 per ton, which represents a net profit of \$100,000.

South from the Idaho, and in the immediate vicinity of Grass Valley, are a number of quartz mines, which are named as follows: Empire, Kate Hayes, Pennsylvania, Cassidy, Central, Russian, Laden, Orleans, Sebastopol, and Belay; on the west are the Peabody, Cold Hill, Rocky Bar, New York Hill. In the midst of these is the

#### Rose Hill Mine.

Which was discovered some years ago; it is known as "blind ledge," that is, it was found, in an old orchard, 30 feet below the surface. The mine is the property of Lawrey & Long, and is considered one of the best-paying small mines in the district. The ledge is only from four inches to two feet in width, and the ore yields an average of \$75 per ton. The shaft is down about 130 feet. The mine has yielded many thousand dollars, and promises to become a very valuable property.

The mineral resources of Nevada county are not confined to gold and silver alone, for it is known that immense deposits of copper and iron exist in various portions of the county. The

#### Indian Spring Iron Mountains.

Recently discovered, is situated about eleven miles from Grass Valley, on the road to Marysville. The mountain runs north and south, and the iron crops out for a distance of over a mile in length, and from one to two hundred feet in width. The estimate of ore in sight is about 300,000 tons, and its character is red hematite and assays 53 per cent.

The property is owned by a company of the above name. They have run a tunnel into the mountain a distance of 600 feet, and have struck three distinct veins; the first is 38 feet in width; the second, 60 feet; and the third, 40 feet. We consider the property worthy of capitalists' attention. No finer iron is found than that produced at Clipper Gap, Placer county, and the Indian Spring Iron mountain is on a line about 30 miles north.

#### Copper Ore

Is also known to exist, in paying quantities, in various portions of the county. The mines of Nevada county offer many opportunities for the profitable investment of capital. We believe that iron will yet become one of the most important of the products at Nevada county. What the county needs more than anything else is practical iron men with capital—capital, the magic wand that will unlock the vaults in which this mineral wealth is now sleeping; and we believe the time is not far distant when columns of smoke will rise from the iron smelting furnaces and reduction works as it now does from her many gold mines. There certainly must be some way provided for extracting the hundreds of millions of dollars of gold, now lying in the immense gravel beds of Nevada county, which will be equally satisfactory to the farmer in the valleys as well as the miner in the mountains.

#### The Lumber Interest

Of the county is an extensive one, the timber consisting of pine, fir, spruce and cedar. The last-named is considered the most durable, when placed in contact with the ground. Of the pine there are two varieties, the most valuable for commerce being the sugar pine, which grows to a very large size in the east end of the county. The common yellow pine grows in nearly every part of the county. There are several very extensive lumbering companies in this county. Towle Bros., of Dutch Flat, Placer county, have thousands of acres of timber lands in Nevada county, and a narrow-gauge railroad for transporting lumber from their mills, in the woods, to the C. P. R. R., from whence it is shipped all over the coast.

The V. L. Lumber Company's mills, located about twelve miles from Nevada City, with a heavily timbered section surrounding them, are the leading ones in the upper part of the county; they have a capacity of about 5,000,000 feet annually. Water power is relied on for doing all the labor. The saw mills are run by a mammoth Hardy wheel, the logs being transported, by the same power, from the dam to the mill, from whence they are finally carried to the main yard, at the outskirts of Nevada City, by means of a dumbo.

Mearns, L. & D. Merrill, whose headquarters are at Nevada City, are likewise extensively engaged in the manufacture and sale of lumber. Their mills are located on Rock Creek.

Louis Voss's mills are situated some fifteen miles northeast of Nevada City. Mr. Voss also deals extensively in lumber at Grass Valley. The most important lumber district is in the eastern portion of the county, and is known as the Truckee Basin. As we have frequently described the logging and lumbering interests of the great redwoods of Humboldt, Mendocino and Del Norte counties, where steam is used, we will now give a description of quite a different process of logging carried on in the Sierras. The

#### Truckee Lumber Company

Own a fine double mill, run by water power, which has a capacity of 75,000 feet per day; it is located at Truckee, on the river of the same name. In connection with the mill there is an immense factory which disposes of some 4,000,000 feet of lumber annually; they have, also, a steady lumber trade, in Utah and the State of Nevada, of from 4,000,000 to 8,000,000 feet per year. Last year the company sawed 11,000,000 feet of lumber. They own some 7,000 acres of timber land lying along the Truckee river. The canyon of the Truckee is narrow and deep, and the sides are, on an average, from a half to a mile high. The tops of the bluffs, on either side, are extended plateaus, which, sloping gently toward the river, extend back a mile further, and in places two miles. These plateaus are densely timbered with sugar and yellow pine, red and white fir. Obstacles are constructed of timber, averaging twelve to fourteen inches in diameter, and about 40 feet in length. These timbers are laid about six to eight inches apart, the small ends notched into the butts of the next sticks, the joints facing being beveled smooth and greased with tallow, and the chute is complete. On the plateau, or gentle grade, three or four horses hitched tandem draw them down the grade. A hook is attached into the hind end of a log which has three or four other logs fastened to it with hooks. The saw logs are piled of their bark. Sugar pine logs, five feet in diameter and from twelve to sixteen feet long, are drawn down the horse chutes to the top of the bluff, the hook is loosened without stopping, and down they go, for half a mile or more, like a streak of lightning. They are received in a reservoir made by damming the river, otherwise they would dash each other into kindling wood. Once a week, or such times as the logs are wanted at the mill below, the gate of the reservoir is drawn and the flood carries them down the stream to the mills.

The Truckee Lumber Company was established in 1868. They are also manufacturing a large amount of doors, window sashes and blinds, and give constant employment to some 400 men in the manufacture of all kinds of fruit and packing boxes. They also have another lux factory on Berry street, San Francisco. The company consists of E. J. Brickell and W. H. Kruger.

The Pavile Lumber and Wood Company, whose headquarters are at Truckee, have their mills located on the Truckee river, some eight miles east. They are doing a large business in this line.

Some eight miles east from Truckee is the Boca Mill and Lumber Company's mill, which has a capacity of 10,000,000 feet of lumber annually.

At Verdi, on the State line between California and Nevada, are also extensive mills.

Nelson Martin, of Truckee, is largely engaged in manufacturing all kinds of packing boxes.

The forests of timber are fast being converted into lumber. From the last information we could get, we estimate the standing saw timber of Nevada county at about 530,000,000 feet.

#### Railroad and Shipping.

The facilities of Nevada county, both for travel and shipping, are excellent. The main line of the Central Pacific runs along the southern line of the entire county, forming a junction with the Nevada County Narrow-gauge Railroad at Colfax, 135 miles northwest from San Francisco.

The Narrow-gauge road, 22 miles in length, was built by private capitalists from Nevada county citizens, and its capital stock is now at a premium in the New York market. Mr. John F. Kidder, the gentlemanly Superintendent, has the credit of managing the affairs of the road in a very efficient manner, both for the company and its patrons.

At Nevada City, the terminus of the road, there are two stage lines, one owned by Green & Co., and the other by D. Wellington, leaving daily for Downsville, North San Juan, Forest City, Grantville, North Bloomfield, Lake City, Camptenville, Marysville, Dutch Flat, and all parts of northeastern California.

B. F. Harris runs a line of busses between Nevada City and Grass Valley, affording ample accommodations between these two rival towns.

#### Nevada City.

Our bird's-eye view of this bustling little mountain city, gives a correct representation of the place. It now has a population of 6,000 people, who are nearly all directly or indirectly interested in mining. It is the terminus of the N. C. N. G. R. R., and is situated on both sides of Deer creek, which lies in a deep canyon. The creek is spanned by a beautiful wire bridge manufactured by A. S. Hallide & Co., San Francisco. Nevada City is certainly one of the handsomest and liveliest towns of California. The streets, like those of most mining towns, do not run with any regularity. Many of the mines yield regular dividends. It is also claimed that Nevada City is the healthiest place in California.

It supports two newspapers. The Nevada (daily) Transcript, established in 1860, is a live, newsy, local paper, giving all the latest mining news. It is published by Brown and Calkins.

The Nevada Herald, a tri-weekly, was established in 1875, and is published by Gray & Davis. As these papers are published in the principal mining district in California, they may be found in all the mining camps on the coast.

The Citizens' bank, with an authorized capital of \$200,000, does a large business in gold dust and bullion. The officers are: E. M. Preston, President; John T. Morgan, Cashier, and D. E. Morgan, Secretary. The corresponding banks are the First National Bank, of San Francisco, the First National Bank of New York, and the National Bank of D. O. Mills & Co., Sacramento. The

#### Manufacturing Industries

Of Nevada City are quite extensive. George G. Allen, proprietor of the Nevada Foundry (established in 1858), is manufacturing all kinds of mining machinery, employing from 25 to 30 mechanics. He is now extensively engaged in building the celebrated Pelton water wheel.

Lawrence & Barlow, owners of the Plaza Foundry, are largely engaged in manufacturing mining machinery, brass castings and building material generally.

A sash, door and blind factory is owned by Geo. M. Hughes, who has been in the business for the last 27 years, and has built up quite an extensive trade in this line.

Carrington, lugs and wagons are made, in large numbers, by William Seaman, who has the reputation of turning out first-class work.

P. Clancy has been in the same business for the last nine years, in connection with J. G. Bowdman, the wagon-maker; they make all kinds of wagons, from a light carriage to a heavy freight wagon. Wm. Barton, who makes a specialty of picks, sledges and miners' tools, is the most efficient of the Nevada City blacksmiths.

There are three breweries: The Nevada, established in 1850, is owned by E. Weiss; the Milwaukee, owned by Geo. Gehrig; and the United States. They have a combined capacity of 10,000 barrels annually.

L. Siefert owns a soda works and refinery; they are situated on the south side of Deer creek.



**James J. Ott.**

The assayer, who established himself here as early as 1853, has assayed ores from all parts of the coast. Mr. Ott gave us a complete description of the metals found in California. He is authority for all mines here. Miners should consult him and get his report before they place a value on their mines, for he is thoroughly informed on mines and ores. At Mr. Ott's office gold ore, of every description, are refined, melted and assayed, and gold bars are exchanged for coin.

**Merchants.**

The merchants of Nevada City derive more than a passing notice. George E. Turner has the largest and best selected stock of all classes of hardware in Northern California. He makes miners' supplies such as Vulcan powder, hydraulic pipes, etc., a specialty.

Hyman Bros., importers and dealers in clothing, also have wholesale stores at New York, San Francisco and Honolulu. H. I. Mr. Charles Grimes represents their house here.

B. H. Miller's clothing emporium, next to the Citizens' bank, is one of the finest stores in Northern California.

K. Caspers has an immense stock of men's and boy's clothing, boots, shoes and hats.

Three doors below the post-office is F. M. Schmidt's tailoring establishment.

The second door from here is A. Wutke's fashionable boot and shoe store.

William Holmes established his harness and saddlery shop seventeen years ago; he now has a trade extending all over the mountain region.

G. W. Welch has an extensive book and stationery store, and also deals largely in jewelry, optician's goods, musical instruments, toys, etc. Copies of THE RESOURCES, and other periodicals, are always on hand.

Carr Bros., druggists and stationers, also carry a large stock of toilet articles, etc.

G. E. Brand & Bro. keep a stationery and variety store.

The Nevada drug store, of Walter D. Vinton, cor. Brand and Pine streets, is supplied with a full stock of goods.

C. J. Brand and F. C. Loeftje have a fine jewelry store, and also manufacture quartz jewelry.

Walrath & Hicks have a grocery and provision house; they are doing an extensive business in their line.

George C. Gaylord has a similar establishment.

There are two auction and commission houses in the city. F. G. Guild has the oldest establishment, having been here for the past thirteen years. Geo. Tracy came, recently, from Grass Valley. The houses carry large stocks of furniture and household goods, and sell at auction or on commission.

C. A. Barrett, the leading merchant tailor, gives constant employment to six workmen, and has a trade that extends throughout the entire upper country.

Stephen Roberts' variety store is a place well patronized by the people of Nevada City.

**Hotels, Etc.**

Nevada City is well supplied with hotels. The National Exchange, the leading first-class house, is located in the business centre of the city, with post-office, express and stage offices in the same building. It is owned and kept by Stanley A. Eddy.

Blight's dining rooms, opposite the National Exchange, are kept by Thomas Blight.

W. Mills keeps the Chicago restaurant; he furnishes meals at reasonable rates.

The other hotels of the town are the New York, Stumps and the Union; all of them furnish ample accommodation for travelers and tourists.

Nevada City also boasts of several fine livery. D. Wellington is proprietor of the Eureka express and several stage lines; he keeps in connection with them a first-class livery.

J. A. Graham, proprietor of the Union stables, has a fine lot of turnouts for the accommodation of commercial travelers.

A. B. Chase, the live artist who sketched the city for our illustration, deserves great credit. He is publishing a fine large-sized lithograph of the city, which is appreciated by the citizens.

**Grass Valley.**

The largest city in the county, has a population of 6,500. It is on the line of N. C. N. O. R. R., sixteen miles north from Colfax, and 203 miles north from San Francisco. It is situated in a valley, 2,500 feet above sea level, in one of the best quartz-mining districts in the State. The majority of the

miners are paying out; they have been described elsewhere. Grass Valley was, for many years, a lively place; but many of the most enterprising citizens have made fortunes, by mining and other industries, and have left the town, their places being filled by Cornish miners, who seem to be content with miners' wages.

**The Press.**

There are one weekly and two daily papers published here. The Grass Valley Union (daily) was established in 1864. It is a morning paper, and is published by Mitchell and Champion.

The *Flint Hill Tidings* (daily and weekly), is now in its fourth year. The weekly is issued every Saturday. They were established in 1879, and are edited by R. Sheenmaker, and published by H. Spaulding. Both are well patronized by the people of Upper California, as they are live local papers.

Wiseheim Bros. & Co., private bankers, are now in the business seven years, and have the confidence of the business men of the county. Their corresponding banks are the Anglo-Californian, of San Francisco, and that of C. F. Richards, of New York.

**Hotels.**

The Holbrook, the only first class hotel in the place, is a fine two-story brick. It is one of the best conducted hotels we ever had the pleasure of stopping at, and is kept by D. P. Holbrook.

The Zenor, on top of the hill, is the headquarters for teamsters, as there is a large barn connected with the place.

The Wisconsin, a two-story brick, is located in the business center of the town; it is kept by W. H. Mitchell.

The Glenbrook, at the south end of Mill street, is kept by Mrs. L. Parr.

The Washington, owned by the estate of John Frank, has about the same capacity as the Calhoun. The

**Merchants.**

Of Grass Valley are carrying a larger stock of merchandise than those of many other interior cities of California. We visited the following stores: I. Haas & Co.'s clothing emporium; Charles Nathan & Co., dry goods; Elfin Biggs, extensive hardware store; Peter Johnson, hardware store; J. H. Henderson, Pioneer shoe store; Granger & Watt, groceries, provisions and commission house; Coleman & Glassen, grocery house; H. Wahler, carpet and furniture store; W. K. Spencer, book and stationery; the drug store of J. D. Meeks, and also that of W. Lantzenhiser, who has been in business here since 1854; Geo. Carson, saddlery and harness, established in 1865; the music store of T. R. Coulby, who is selling Mason & Hamlin organs, pianos, sewing machines, etc.; Alf. Berg's elegant jewelry store, who also makes a specialty of selling and repairing watches. All of these are leading houses, and some of them would do credit to a city as large as San Francisco.

**Howard L. Wood.**

Who recently graduated from the State University as a practical assayer, is meeting with success here, as this is one of the best locations for a profession of this kind.

George W. Hill does a general insurance business. He is the manager of the Grass Valley branch of the Home Mutual.

C. E. Clinch, at No. 13 Mill street, is the agent for some of the most reliable insurance companies doing business on the coast.

A. Nevens, Jr., is acting as agent for the Royal, Norwich and Lancashire insurance companies, be-

public, by July 4th, 1893. It is owned, and will be occupied by I. Sherritt, who deserves credit for his energy in rebuilding the hotel, so soon after it was burnt.

The other hotels are: The New American, kept by Whitney & McKay, and the Millet, on the south side of the R. R. track.

**Stason, Crocker & Co.**

So well and favorably known all over the coast as the live merchants, have stores in the State of Nevada at Carlin; in California at Truckee, Sacramento, Mojave, and Los Angeles; in Arizona at Yuma and Benson; in Texas at Camp Rice. The firm's office and headquarters are at 202 Sansome street, San Francisco.

I. L. Lewison & Co. deal in dry goods and general merchandise; they are also in the banking business, which is quite convenient for the lumber men and shippers generally.

P. Barchhalter & Co., who are proprietors of the Pacific Lumber Company, have a large stock of general merchandise.

J. Adolph has a fine stock of drygoods, clothing, dress goods, fancy goods, etc.

G. W. Harrison has a variety store, and deals largely in green, dried and canned fruits, vegetables, etc.

D. B. Tanner keeps a general variety store; he is Postmaster, and also acts as agent for Wells, Fargo & Co.

One brewery, the St. Louis, furnishes the lumbersmen with the favorite beverage. Eight miles east, along the river, brings us to

**Boca.**

The largest shipping point, for its size, in the State. Fully 10,000,000 feet of lumber are shipped annually, and also 100,000 tons of ice by the Boca Ice Company. The

**Boca Brewing Company.**

Two thousand tons of ice in their business; they have a capacity of 100 barrels per day, or 30,000 barrels annually, which is shipped all over the coast to Arizona, Nevada, Utah, New Mexico, Oregon. The principal office and depot is on Berry street near Fifth, and the branch office is 406 Sacramento street, San Francisco. The brewery, at Boca, is situated in one of the most romantic spots in the mountains, amid perpetual snow and ice. O. E. Miller is manager at Boca; Albert Pfendler, brewer; and Wm. Heese, general superintendent at San Francisco. We now pass on to the northwestern part of the county to the fourth town, that of

**North San Juan.**

Which has a population of about 800. It is thirteen miles northeast from Nevada City, in the center of the gravel-mining district. Geo. newspaper, the Times, established some

ten years ago, is published by O. P. Sudger. There are two hotels; the National, kept by John German, is the principal house in the town; the other, the Rome, is kept by Stephen Solaro.

The San Juan Brewery, of Geo. F. Koch, manufactures about 1,000 barrels of beer.

North San Juan has a fine, healthy climate. The mines have not produced very well of late years, and the town is not improving. The other towns in the county are North Bloomfield, (which is fifteen miles north of Nevada City, situated in the gravel-mining district), Cherokee, French Corral, and Columbia Hill—all little mining camps, located north of Nevada City.

**A FOOTHILL FARM.**

The Grass Valley Tidings has an interesting description of the farm of Theodore Schwartz, Pleasant Valley, showing what can be accomplished in farming in California by thorough cultivation:

The land was but a barren waste, the haunt of the "Spanish hufo" and the versatile goat—mostly goat. Mr. Schwartz subjected it to a system of irrigation, coupled with muscle, a couple of mules and a plow, and of course some vexation of spirit, and the result is he now has a home as long as he or his family lives. It is a beautiful spot, nestled at the foot of Beckman's Hill, and is about the first place which delights the eye when you descend into that picturesque little valley. This should be the case of hundreds between here and the Yuba river and miles away towards the different points of compass. There is no reasonable excuse for their not being dotted all over the section of the country, just such fertile spots. Mr. Schwartz has quite a clover crop this year and not long since he was offered \$20 per ton for 60 tons of the hay, and he can raise several crops a year on this place.



DONNER LAKE, NEVADA COUNTY, CAL.

The Golden Gate is at the east end of the town. William Bee is proprietor.

Further east is the Western, kept by Mrs. E. J. Hobby, and also the French, kept by Mrs. Schaffer. The

**Manufacturing Industries.**

Of Grass Valley are quite extensive, considering the size of the place. The Grass Valley foundry and machine shop is owned by J. M. Lakenan, who has been engaged in building mining machinery for the last twenty years. His machinery, such as stamp mills, pans, pumps, amalgamators, etc., can be seen among the best in the mines.

M. C. Taylor, proprietor of the Mill street foundry, has been here for twenty years manufacturing all kinds of mining machinery, hoisting works, pumps, etc.

The planing mills of P. Braustetter, recently destroyed by fire, have been rebuilt on a much more extensive scale. A large lumber yard is run in connection with the mill.

Near by are Stewart's planing mills, doing all kinds of work in this line.

The Eureka lumber yards, of Geo. Whitesides, and J. C. Conaway & Bros.' yards furnish building and mining material to the surrounding country.

We judge from the number of brewers (four in all), that the miners require considerable beer. The City brewery, Thomas Hodge & Co., proprietors, has a capacity of 4,500 barrels annually. They also manufacture ale and porter, and have a trade that extends throughout Northern California.

The Grass Valley brewery, owned by D. Binkelman, can turn out 900 barrels annually.

The California, Fritz & Vogelmann, proprietors, has a capacity of 600 barrels annually.

sides several other English and foreign companies. One of the most novel and ingenious things we have ever seen was Prof. P. D. Horton's invention for holding a pen while writing. It will, no doubt, be adopted in all the schools and places of learning in the country. We will explain this ingenious invention at some future time.

We now pass on to the eastern part of Nevada county to the third largest town in the county,

**Truckee.**

Situated on the C. P. R. R., on the east side of the summit of the Sierras. It has a population of about 1,200, and has suffered severely by fire several times, but has fully recovered, and is now built up more substantially. The town is principally supported by the immense lumber interest, which is described elsewhere. Truckee lies 259 miles northeast from San Francisco, and is the place where tourists leave the railroad for Lake Tahoe.

The Truckee Republican is the only paper published in the town. It is a live newsy paper, published every Wednesday by the Truckee Publishing Company, and is edited by W. F. Edwards.

John F. Moody's stage line runs daily between Truckee and Tahoe City, a distance of 12 miles; Sierra Vista, 28 miles; Loyalton, 28 miles; Glenbrook, 24 miles; Carson City (Nevada), 28 miles; Virginia City (Nevada), 56 miles. Mr. Moody has recently opened a line of stages to the Hot Spring at Lake Tahoe.

**Hotels.**

The Truckee, which is conveniently located on the south side of the railroad, furnishes excellent accommodations. This popular hotel has recently been purchased by Stewart McKay.

The New Sherritt will be open, for the traveling



## MOUNTAIN MARVELS.

There is no part of the State that affords a greater or more interesting field to the student of natural history than the scope of country lying along the western border of the country, and known as the Coast Range mountains. Rising rather abruptly from the plains the mountains reach an average height of about 4,000 feet, though some of the peaks reach a higher altitude, notably that of Mount St. Carlos—the loftiest peak on the range, which reaches an altitude some 200 feet greater than the noted Mount Diablo. The mountains are irregular and are intersected by sinuous canyons which pursue in their course every point of the compass, seemingly wriggling in agony to find an outlet to the plains. Here and there the canyons widen out into little valleys, in which the settlers build their homes and raise a little hay and vegetables, but the soil is so impregnated with salt and other minerals that agriculture can never be pursued to but a limited extent, but is valuable, and is devoted extensively to stock-raising and mining. The mountains seem to have been forced from the bed of the ocean by some giant convulsion, as their whole surface is covered with traces of old oceans. Some parts are covered with immense beds of shells of the oyster, mussels, etc., many of which are very large and well preserved. In other places the shells appear in beds of petrified mud or sand. J. C. Crump, a resident of the section, has collected over forty varieties of shells. Beautiful and strange petrifications are also found, among the rare ones that we have seen being a petrified tarantula's nest. Among the wood petrifications that deserve especial notice are two trees—one a juniper, about forty feet long and three feet deep in diameter at the butt (five feet counting the swell of the roots), and one foot at the top. On it are a number of small limbs and knots, and all nearly as hard as flint. Were this tree removed to San Francisco, and set up in one of its squares, it would be as great a curiosity as Cleopatra's Needle is to the sightseers of New York. The other tree is a redwood. Two sections of it have been transformed into solid rock. These sections are each some forty feet in length. Originally the tree was some 200 feet in length and six feet in diameter. Some fine specimens of quartz are found in it. Mr. Crump states that he found one piece of petrified wood that bears plainly the marks of having been cut by a sharp-edged tool before being transformed into stone. Mineral springs, both hot and cold, are found, and some of them, notably Rodgers' hot springs, are possessed of remarkable medical powers. No two springs or creeks possess the same quality of water, and the effects of the internal regions of a man traveling through that section, if not agreeable, are certainly prompt and exhaustive. The mineral wealth of these mountains is great. Valuable veins of cinnabar abound, and some of them, as is well known, have been worked by the New Idria Company with profit for years. Heavy deposits of coal, chrome iron and gypsum are to be found, and will be worked at a profit in the near future. Promising springs of petroleum also exist, but their extent and value are as yet problematical. In future years these mountains will be one of the leading mining sections of California.—*Fresno Exporter*.

## SANTA CLARA VALLEY.

In every direction in this valley may be seen the results of cutting up the small farms. Hundreds of homes have already been made in five to twenty acres of land, and this year the process of subdivision is going on more rapidly than ever. At every turn trees are being planted, wells are being bored and preparations made for more new homes. And this is the right use for such a valley as this. It was made for the purpose of providing healthful homes for people of education and refinement. Its fruit trees and vines can be cultivated without much hard labor, and these products can be made to maintain their owners in comfort and independence. It is not too much to say that ten acres of land in this valley, well cared for, will yield as much actual profit as a hundred acres in most other parts of the world. And the work and expense of caring for the one is really but a little more than a tenth part of what is required of the other.

These facts are becoming known in all parts of the country, and thrifty citizens are flocking hither to escape from the dreary routine of hard labor in the Eastern States, to the comparative ease and independence offered here. People of intelligence also desire to escape the Arctic rigors of the winter, and the equally disagreeable and debilitating effects of the hot summer. And every one that comes sends for his friends and neighbors. There is no dissatisfaction, and indeed he must be hard to please who is not suited with the conditions of life here. Of course there are few chances to make fortunes, but wise men know that money is in no sense to be compared with health and comfort, and they make their arrangements accordingly.—*San Jose Times*.

## RICH GRAVEL.

The face of the North American tunnel, run from near Gilsonville, Sierra county, says the *Downville Messenger*, is now in Plumas. The gravel pays \$2.25 per car load.

## VENTURA COUNTY'S INDUCEMENTS.

The following we take from the *Ventura Signal*, a paper which never fails to point out the many advantages its county has to offer settlers:

Never at any year or season of any year has Ventura county held out such superior inducements, to men seeking homes, than at present. To the man of limited capital, but who is willing to work, we say, come. We have a climate unsurpassed by any on the face of the earth; our soil is of the richest, and for every dollar invested a handsome return is sure to be given. By prudent and careful economy, a man can, in a very short time, make his term pay for itself—this has been demonstrated in more than one instance. Everything he plants grows with but very little care, and we have the cheapest mules of transportation for all our marketable produce—by water, which is cheaper by one-half than the railroad can deliver it in San Francisco. Ventura always stands first as a corn-producing county of the State in a good year, and very near the top of the list as regards barley-raising. Besides, her land lies in such a state, with such exceeding levelness, that much less labor is required in cultivating it than in any of the counties surrounding us. Our broad valleys are not marred by a single hillock, and a man can mount his plow and ride from one line of the county without interruption. Los Angeles is having her boom and will, no doubt, soon have an overflow. This overflow will very naturally find an outlet into Ventura county. In the south and east the people are becoming restless, and we have no doubt but that the residents there will soon be seeking a more desirable locality in which to make a home. To such we say come to Ventura county—here we can gratify the most fastidious taste as regards climate, soil and all other accessories to the comforts of life. Socially, our population is of the best in the land, and comprises many of the oldest and wealthiest families in the State. Our business men should be prepared to receive them in a beneficial manner; to do this our resources, productions and climate healthfulness should be shown up in the true light they occupy. We shall have more to say, in the near future, concerning this subject, and will do all in our power to divert the tide of immigration to our fair shores. Meantime we will cheerfully impart all information on subjects pertaining to our county, so far as it is in our power to do.

## SIERRA MINING ITEMS.

The *Downville Messenger*, of recent date, gives the following items respecting mining in that county:

Very rich quartz is reported at the Four Hills Quartz mine.

The Sierra Buttes Mining Company is clearing the ground for a new quartz mill, which will be in operation next fall.

The Alaska Mine people are preparing to rebuild their hoisting works recently burned. The loss was about \$35,000.

Thos. Sharpe was up from Crizzly Hill, last week, and reports plenty of water and prospects of a good season's run.

The claims at Craig's Flat and Morristown are having a better run than they had last year, but will probably not be able to run for a great while longer.

The Union claim, at Gibsonsville, is having more water than can be conveniently managed, and the output of gravel is not so great as it otherwise would be. The dirt is as rich as ever.

The 1901 Company, at Sierra City, is working a bed of cement which carries much gold. The gravel in the claim is blue colored, soft and averages about two dollars per carload. The gold is coarse, some pieces being worth fifty cents, one dollar and one dollar and a half each.

The Bald Mountain Extension Company, at Forest City, is now working 21 men. Last week, with six drifters on a shaft, 53 ounces of gold, worth \$18.50 per ounce, were taken out, averaging about \$2.10 per carload. The company will increase its working force as fast as developments will justify.

## THE ORE ROASTING PROCESS.

The roasting furnace in operation at the Gold Blossom mine seems to be just what the miners of this county have been waiting for, viz: Something that would save a larger percentage of the gold at a moderate cost. Most of the ore from the ledges in this part of the country will assay from \$50 to several hundred per ton. By the furnace process above referred to the gold and silver can be saved close up to the assay value, and we understand the expense of the process is comparatively light. There is encouragement it would seem, for others to adopt this process, and with a dozen or more of these roasters in operation in this neighborhood this would be a lively camp. Even by the old process the returns being received from the different mines in this locality at present are altogether encouraging.—*Placer Herald*.

## RIVERSIDE

Rev. Thomas K. Beecher, writing from Riverside, to the *Chicago Advance*, has the following nice things to say:

The wonder of it is that it has all come to pass in less than ten years. The change from a verdureless, dusty and nearly level plain to a garden plot ten miles long, and broad enough to measure up 12,000 acres. I am talking about Riverside, Cal.

When one goes to sea on a great steamer, and sits the evening through in the airy saloons, music, carpets and general comforts make one forget that it is ship-life or that all is adrift; so in this reclaimed oasis, one can walk or ride mile on mile through vineyards and orange groves; the way-side delineated by hedges, or shaded by eucalyptus trees sixty (1) feet high; almond trees in bloom; peach, apricot, fig and walnut trees thrown in for luxury and variety! The roads hard and ringing beneath the trotter's feet. Avenues of residences whose architecture is of no mean pretensions. Fountains, flower gardens, vegetable gardens, pastures and mowing plots, in short, a garden township without a wasted acre, and yet, one can jump overboard from a ship after a run of two steps, so one can get out into dryness and desolation by a half mile of walk from the two little "rivers of the water of life," from whose gifts all these growths have to pass. All this has come to pass within ten years, I say.

I never before understood the river poetry of the Bible. But now I do. Of course, irrigation is an old, old story, older than Egypt and the pyramids. But I never read and never expected to see the desert "blossom as the rose;" and the city "made glad;" and the waters that "go swiftly;" and the trees on either bank; and the rivers that are "turned," and "twelve manner of fruits;" and the "healing leaves," all come to pass and making homes for 2,000 people in less than ten years from the dryness and desolation of the forst.

The men of Chicago have some sense of the growth and greatness and are able to talk well. But the patrons of Riverside can talk oranges, grapes and raisins, a steady stream that would flood into silence any Chicago boasts I ever heard. Riverside is worth a visit; I've been here twelve days.

## THE THERMAL BELT FOR FRUIT.

The *Petaluma Courier* calls attention to the thermal belt that exists on our mountains as a desirable fruit climate, and instances the Sonoma range as being favorable for fruit cultivation. That paper remarks that "Captain Mock, a very intelligent farmer who has lived at the foot of Sonoma mountain for over twenty-five years and been a close observer, says that he is satisfied that the apricot and olive will grow to perfection in this warm belt. Bibler's splendid vineyard, one of the largest and most profitable in the county, shows what vines will do. Some of the best land for vineyard and orchard purposes in the State is now being used in large tracts for grazing and grain-growing purposes. Land along the mountain side, well situated and adapted for fruit-growing purposes, is held at from \$30 to \$40 an acre. That is the valley and just as far from town, would readily bring \$100 per acre. We predict that in less than ten years from now, some of the most profitable orchards and vineyards in Sonoma county will be found in the warm zone on Sonoma mountain." The Napa range of Sonoma hills and mountains are known to favor fruit and vine production, and quite a number of orchards and vineyards are now in bearing in the redwood region which give the best of results. There are thousands of acres of land upon these mountains susceptible to cultivation, which are used at present for grazing purposes, that could be turned to better account in vine-growing, while orchard and citrus fruits are much superior to any raised on valley lands. Oranges and lemons, figs, and olives find a congenial climate, while the soil is warm and porous, with abundance of rain and hardly a trace of frost in average seasons. The yield is not so heavy as in lower lands, but the quality of grapes and fruits is far superior. Apples also have better keeping qualities with a more solid flesh, and perfect flavor.—*Sonoma Democrat*.

## CHROME IRON.

In the hills and mountains of the upper part of Napa county, considerable quantities of float chrome iron is found, which seems to indicate the existence of large bodies of that ore. The dirt of 34 cents per pound recently laid upon it is likely to make its gathering, preparation and exportation a lively business. It is in great demand in eastern, western and carpet factories. It is found only in Turkey, Russia, Siberia, California and Maryland. Large quantities are used in the manufacture of iron and steel. Chrome steel has been freely used in the production of the Brooklyn bridge. It gives the permanent green and yellow seen in illuminated papers and bank notes. The manager of the Brooklyn Steel Works says that chrome steel is worth three cents a pound more than any other steel, and he believes that in three years the demand will be greater than the supply.—*Napa Reporter*.

## BLACK SAND.

The black, magnetic sand that is found in abundance in the washings of our gold mines is, by a new process, utilized in the manufacture of cast steel direct from the sand. Eight pounds of sand yields five pounds of steel. The slag that is left is valuable as cement for fire-proof roofing. The inventor's patent that their discovery is destined to revolutionize the steel trade on this coast.—*Mountain Democrat*.

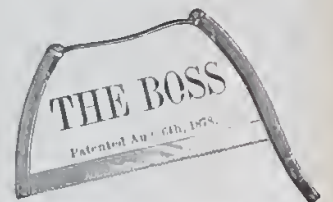
C. P. SHEPHERD, J. PATTERSON, N. W. SPAULDING

## PACIFIC SAW Manufacturing Company,

17 & 19 FREMONT STREET,

SAN FRANCISCO.

## A NEW WOOD SAW!



THE LATEST, THE BEST.

The above illustration shows an AUTOMATIC SELF-STRAINING WOOD SAW FRAME. The saw is strained by means of a Steel Spring secured to the wood end pieces with Metal Bands. With this device a saw is perfectly and automatically strained at all times. No cross bars or braces are required to give stiffness to the frame. The space in wood saw frames usually filled up with such devices is left open, giving the saw greater capacity for sawing large sticks of wood, wide planks or boards. There is no screw straining rod to get out of order.

Price, complete with Pacific Saw Mfg Co's Extra Blade, set and filed, ready to work, each, \$1.50; with their second quality blade, set and filed, ready to work, \$1.25; with imported blade, set and filed, ready to work, \$1.00.

## A LIBERAL DISCOUNT TO THE TRADE.

## AGENTS FOR C. B. PAUL'S

## CELEBRATED FILES.

Planing Knives, Currier Knives, Saw Mandrels, and Saws of Every Description Made to Order.

## THE PEOPLE'S CYCLOPÆDIA

Is the Best in the World for General Use.

COMPREHENSIVE AND COMPACT.—55,000 topics complete in three convenient volumes.

RELIABLE.—100 First-class Contributors. FRESH.—Brought down to 1893, with 50 new colored plates.

NOW READY.—Subscribers not kept waiting with only part of a Cyclopædia.

REALLY CHEAP.—Less than half the price of similar works.

It answers 10,000 questions which are constantly asking themselves in the minds of those who think it ought, therefore, to be in every family and in every school library.

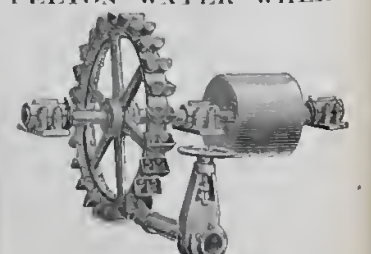
25,000 SETS SOLD WITHIN A YEAR FROM ISSUANCE OF FIRST VOLUME.

Sent for specimen pages, etc., that you may see for yourself and order the work. Active Agents Wanted in Every Township. For Terms, Etc., Address,

## PHILLIPS &amp; HUNT,

1041 Market Street, San Francisco.

## PELTON WATER WHEEL.



MANUFACTURED BY

L. A. PELTON, NEVADA CITY CAL. It gave the highest per cent. of power (91.02 per cent.) at the public test of the reaction turbine water wheels by the United Mining Company at Grass Valley, commencing April 19th, 1884. This was the highest per cent. ever at wheels now in use. It was at once adopted by said company. Send for Price List and Full Particulars.



## PLACER COUNTY.

**Cold Mines—Granite Quarries—Lumbering Interests—Foot-Hill Fruit Lands—Fine Scenery.**

**Lake Tahoe and Other Pleasure Resorts—Towns Described, Etc.**

(By the Traveling Agent of THE RESOURCES.)

By referring to the map of California we find Placer county located on the western side of the great Sierra range of mountains, north-east from Sacramento, and 176 miles north-east from San Francisco. It is bounded on the north by Nevada and Yuba counties, on the west by Sutter county, on the south by El Dorado county, and on the east by the State of Nevada. A part of the eastern boundary of the county is the famed Lake Tahoe, of which we will speak further on. This county was organized by an act of the Legislature approved April 25, 1851. Before that time Auburn, which is the county seat, was the seat of justice of the original Sutter county, then including most of what is now Placer county. In shape this county is nearly a parallelogram, being over 100 miles in length, from a north-east to a south-western direction, while its width, just above Auburn, between the Bear and American rivers, is very narrow, being

## Granite Quarries

The quarrying and dressing of granite is an important item of the wealth of Placer county; there is no finer granite in the known world than the quarries of Penryn and Rocklin. There are several species of granite, the rock at Penryn being much darker than the quarries at Rocklin, but at the latter place it is much easier worked. Large quantities of this excellent building material are annually shipped all over the coast, and may be seen in the public buildings and works of California. Among them may be named the base of the State Capitol at Sacramento, the United States Mint at San Francisco, the dry dock at Mare Island, and, in fact, many of the handsomest buildings in San Francisco were constructed from Penryn and Rocklin granite.

## Lumber Interests.

From the best information we could get while among the people of Placer county, we estimate the standing saw timber of the county at about 470,000,000 feet. The timber consists of sugar and yellow pine, spruce and fir. The lumber sawed is shipped to Arizona, Nevada and Utah, besides supplying the home trade over the Sacramento and San Joaquin valleys. We obtained our information, about the lumber interest of this county, from Mr. A. Towle, of the firm of Towle Bros., whose headquarters are at Dutch Flat. These gentlemen own

berries, raspberries, table grapes, apples, quinces and tomatoes from the vicinity Newcastle, Auburn, Rocklin and Penryn are rapidly increasing year by year, and the fruit from this section is gaining favor. A short distance below Auburn, up the mountains, we find the red soil prevailing, on which the finest of fruit is raised equally with the granite soil, but, as we reach a higher point, small fruits drop out, and the apple, pear and cherry come to a higher state of perfection. Placer county has good shipping facilities as it is traversed by

## Railroads.

The Central Pacific enters the county on the south at Roseville Junction, which is only 18 miles northeast from Sacramento, the capital of the State, the road taking a northerly direction to Colfax, a distance of 85 miles, which is the junction of this road and the Nevada County Narrow-gauge road; the Central here takes an eastern direction across the Sierra mountains. Following on near the line between Placer and Nevada counties to Truckee, a distance of 66 miles further, where it crosses on northeast through Nevada county. At Roseville Junction is the Oregon Division of the Central Pacific, running on north through the western portion of the county. Placer is exceedingly well

## Watered

By numerous streams, the largest being the Ameri-

huancy. Nothing is ever seen floating on the lake, except the beautiful little steamers and pleasure and fishing boats. The bodies of persons drowned in this lake never rise—are never seen again. The entire distance around the lake is 144 miles. Lake Tahoe is the great sanitarium of the Pacific Coast.

There are a number of fine summer resorts built on the margin of the lake, on all sides. The first, from the Truckee side, or principal thoroughfare, is the Grand Central, at Tahoe City, kept by A. J. Bailey. Some eight miles further on, by steamer, is A. J. McKinney's, where a fine hotel and a number of cottages are built for the accommodation of those who wish to spend the summer. The mountains here are from two to three thousand feet higher than the lake. Twelve miles further on brings us to

## Tahoe House.

Owned by E. J. Baldwin. This is one of the finest resorts on the coast. In the house are the post-office and telegraph and express offices. The house is situated about 200 feet from the margin of the lake, amid grassy meadows, magnificent groves, croquet and tennis lawns and archery grounds. There are horses, carriages, boats and fishing tackle at the command of the guests. Captain Gordon, formerly manager of the Anzerias, of San Jose, is superintending the Tahoe.

Three and a half miles further on brings us to



SCENE ON TRUCKEE RIVER, NEVADA COUNTY, CAL.

about eight miles. In its topographical features, the whole of its territory faces toward the setting sun, extending from an altitude, on the plains in the western portion of the county, of some 40 feet to over 7,000 feet at its eastern boundary line, embracing nearly every variety of climate known in the State. The area of Placer county is 915,000 acres, of which one-third, or 330,298 acres, is assessed. The

## Mineral Resources

Of this county are extensive and very rich. The gold mines of the section, both placer and quartz, have yielded up in the millions; the former, from which the county derives its name, have been worked from the early days of '49. The two divides are distinctly hydraulic sections, and the works are, in many instances, very extensive, notably so around Dutch Flat, Gold Run, Iowa Hill, Forest Hill, Bath and Michigan Bluff. Millions of dollars have been expended in getting the water, in pipes and ditches, from the mountains, and there are several thousand miles of ditches in the county.

Drift mining is carried on to some extent, two of the most notable places being at Forest Hill divide; one at Damascus, and the other at Sunny South. The tunnel at the first-mentioned place is in the hill over a mile. There are also numerous quartz ledges being worked, and prospectors are continually making new discoveries. Most of the quartz mining is carried on in the foot-hill section, near the towns of Auburn, Ophir, Newwatt and Penryn.

from 12,000 to 15,000 acres of timber land, and a railroad nineteen miles in length, extending from Alta, which is on the line of the Central Pacific Railroad, up into the timber land; they have four saw mills in operation, and cut and ship from 12,000,000 to 15,000,000 feet of lumber annually.

## Farming and Fruit Lands.

The farming section proper consists of the average plain land, and embraces the west end of the county. It is not so rich a soil as that of most valley lands, as it is of a granite formation, on which crops of wheat, oats, barley and hay are raised, varying in quantity and quality with the amount of moisture during the season. The successful farmer, as a rule, summer-fallows one-half of his land, and crops the other half, thereby prolonging the fertility of the soil and making crops more certain.

The foot-hill, or fruit lands, are the most valuable in the county; they extend over about one-half of its territory, and circle around to the north of Lincoln and Sheridan up to Bear river; and from Rocklin, southeast towards Volcom, we have the beginning of the foot-hill fruit section. This section is composed of rolling hills, traversed by ravines, and, up to within two miles of Auburn, is of granite formation. This point of the county is the most prosperous, as it is filling up with settlers who are turning their attention to the raising of fruits and berries.

The shipments of peaches, pears, cherries, black-

can river, with its several branches, which afford some of the grandest scenery in the State. Few people who come to California from the East, overland, but what remember coming around Cape Horn, on the Central Pacific Railroad; and through the courtesy of the engineer, who stops his train, you look down—down—for seven thousand feet, to the thread-like stream of the American River below. A grander and more exhilarating sight than this cannot be imagined. Coming down the western slopes of the Sierras, your eyes feast on scenery that is varied, novel and magnificent. In a ride of two hours and a half you come down from 7,000 to 100 feet, where you enter the Sacramento valley, from perpetual snow down to everlasting summer, which gives you the first breath of the balmy, soft air of California. The other streams are: Bear river, which forms the line between Placer and Nevada county, and the Truckee river (on the east), which is the outlet of

## Lake Tahoe.

One of the most wonderful bodies of water in the world, lying at an altitude of 6,218 feet above the level of the sea. It is 23 miles long and 15 miles (in the form of a parallelogram), and lies northeast and southwest, partly in California and partly in the State of Nevada. The greatest depth yet found is 1,800 feet. The water is so transparent that, where the depth is from 80 to 100 feet, trout can be seen at the bottom. Owing to the altitude and rarity of the atmosphere the water has little

T. B. Bawland's, who has built quite a town. He keeps plenty of saddle horses, and has a dairy of 50 cows; his cream and butter are mostly consumed by the different hotels around the lake.

Fourteen miles further, on the Nevada side, we come to Glenbrook, where there are several saw-mills, an hotel and a narrow-gauge railroad, running in a zig-zag direction to the summit of the mountains, where a V-dome takes the lumber and wood to Carson City, the capital of Nevada. From Glenbrook another rail is made, a distance of fourteen miles, back to Tahoe City. The steamer makes the round trip in six hours. Mrs. E. B. Crocker, of Sacramento, has a beautiful summer resort (Idlewild), where a number of cottages are built amid a grove of beautiful evergreens.

Of the thousands of visitors to Lake Tahoe every season, not one in ten obtains even a passing glimpse of Emerald Bay. Tahoe is, perhaps, the best known of the beautiful lakes with which California abounds. The landscape view is remarkably fine and inspiring. Every mile of the stage route, from Truckee to Tahoe, is teeming with objects of grandeur and enchantment.

## Hot Springs

Is a beautiful place recently opened by A. A. Bayley. Mr. Moody runs a regular line of stages from Truckee to the springs. The temperature of the air at Hot Springs is, at least, ten degrees warmer than at Lake Tahoe. The warm sulphur bath, particularly the swimming baths, are peculiar features



of the hot springs that can not be found elsewhere around Tahoe. We will now give a brief description of the different towns and villages, the largest of which is

#### Auburn.

The county seat, which is one of the oldest towns in Northern California, having a population of 1,500. The town is located nearly one mile west from Auburn station, on the C. P. R. R., 157 miles northeast from San Francisco. The elevation here is 1,375 feet above the sea level. The greater portion of land in this vicinity is gold-bearing mineral, but where water can be had, fruit culture is very profitable, as the location is below the snow belt and away from the fog belt. Lands are valued at from \$5 to \$100 per acre for fruit land which will grow apricots, apples, cherries, plums and all kinds of berries in profusion, besides the finest of grapes.

There are several health resorts here, the climate being considered the healthiest on the continent. At the station are several good hotels. The Board House was recently purchased by W. E. Freeman, and is a splendid place for tourists, commercial travelers and business men.

On the east side of the railroad is the Globe, kept by A. Crawford. The location is the most eligible in all California, as the great Sacramento valley is in full view on the west, the snow-capped Sierras are on the east, with the great canyon of the American river in the foreground. Stages leave the station every morning for Georgetown, Greenwood, Coloma and Placerville, over a picturesque route, through the old gold "diggings of '49."

The town of Auburn is located in a small valley, and, like most California mining towns, is not laid off with any regularity, but it has pleasant villages, nice, shady nooks, and fine springs of crystal water. There are several churches and good schools, and the business houses are nearly all built of brick.

The American Hotel, recently purchased by Frank Tull, is a fine, three-story, fire-proof brick, and is kept in the very best of style.

Andrews & Hollenbeck, who do a private banking business, have been established since 1857. They are also agents for Wells, Fargo & Co.

Auburn has several first-class local newspapers. The Placer Herald is the second oldest paper on the Coast, (the Alta claiming the palm). The Herald was established Aug. 8th, 1852, and is printed on the oldest press in California—the one with which Sam Brauer printed the *Californian Star*, as early as 1847. It has a large circulation, is ably edited, and is published every Saturday by J. A. Fletcher.

The Placer Argus, which is edited and published by H. W. Fenton, was established in 1873, and is an excellent paper, being issued every Saturday.

Wills & Hunley, stationers, keep a large stock of popular periodicals, including *The Resources of California*. They also have a full assortment of school and library books at the post-office store.

A few doors from there, in the same block, is the saddlery and harness shop of Chas. J. Hellwig, who constantly keeps a full line of goods on hand. Ogden Mallery, at the west end of Main street, has a similar establishment.

Mr. T. E. Stephens, who located here in 1862, started a general grocery and provision store, and, after twenty years of successful trade, to-day has one of the finest stores of the kind in the county.

Auburn has two fine drug stores, one of which is kept by S. M. Stevens, and the other, on the opposite side of the street, is kept by E. C. Suowden.

Auburn also boasts of the oldest brewery in the State, having been in operation since 1851. It is owned by Rahl & Weber.

Five miles down, towards the valley, we come to

#### New Castle.

Which has about 200 inhabitants, who are mostly engaged in the fruit business. The New Castle Fruit Growers' Association are doing an extensive business in boxing and shipping fine fruits East, and to Sacramento and San Francisco markets.

The next town in the county is

#### Dutch Flat.

which is located 31 miles east of Auburn. This town is about one-half mile from the railroad, down in a canyon among the hydraulic mines. This has been one of the richest gold-producing sections of the State, and at present has a population of about 900, mostly engaged in mining and lumbering. There is an abundance of water here which has been brought in ditches and pipes at great expense. Here are inexhaustible gravel banks, rich with placer gold.

A daily stage is run from this place to Nevada City, a distance of 17 miles, by T. R. King.

Dutch Flat has one newspaper, the *Placer Times*, published by W. A. Wheeler.

Towle Brothers' lumber office is located here; a description of the business of this store is given elsewhere.

W. & P. Nicholas are doing a banking business, principally in gold dust and bullion.

H. B. Hudepohl established himself here as early as 1853, in the mercantile business, and now has the largest store of general merchandise in the place.

The town has two very good hotels, the Dutch Flat Hotel, built in 1851 and re-built three years ago, is kept by J. Malloway; the other is the Placer Hotel, kept by W. A. Sharron.

One hardware store, kept by W. H. Hillhouse, who has been here for 31 years. John T. Jones established the Union Drug Store in 1853. H. Cohn & Brothers' Clothing Emporium is also an old established store. G. S. Meeker's general store, and J. H. Runckel's grocery store, were established in 1857. H. H. Halsey conducts the Post-office Book Store, where a full line of books and stationery, also copies of *The Resources*, together with all the daily and weekly papers, may be found.

Ferguson & Davidson, contractors and builders, also undertakers, have built up a business that extends over this and Nevada counties.

G. M. Halsey is the only carriage and wagon maker in the place.

These constitute the principal business houses of Dutch Flat.

#### Colfax.

Is the third largest town in the county having a population of about 600; it is located at the junction of the C. P. and N. O. N. G. railroads, 17 miles northwest from Auburn. A daily mail is run from here to Iowa Hill, a distance of nine miles. This place has recently taken a new life, as it has been ascertained that it is one of the best grape-producing sections in the State. The temperature for the past five years was: February, 43.75 degs.; July, 80.05 degs. Average rain-fall for five years, 46.27 inches. The population is about 800. The climate is superior for sufferers with asthma, weak lungs or throat diseases. The soil is a clayey loam, mostly deep; it is well adapted to the apple, pear, peach, grape, hops, small fruits, etc. Lands produce as much per acre as in better known localities. Land sells at low figures: railroad, at \$2.50 per acre; there is some open for pre-emption. Lumber is worth \$14 per thousand feet, and shak-a, \$9. An owner of 20 to 40 acres under cultivation in fruit, would have an income of from \$2,000 to \$3,000 a year. One ten-acre vineyard here clears over \$1,000 a year. Fruit of all kinds finds a ready market. Failure of grape crops has never been known. All grapes sold here for table use, thus far, have brought \$50 per ton.

Hayford, Perkins & Co., who came here in 1848, have the oldest store in the county, and carry an extensive stock of general merchandise.

Mr. John Battler, the postmaster, has a fine drug and fancy goods store. G. W. Nickell, also, has a store of general merchandise.

J. A. Culver conducts a large carriage and wagon manufactory, giving employment to a number of mechanics, making heavy freight wagons for the mountain trade.

One thing is very much needed at Colfax, and that is a good hotel, as the one formerly here was burned down. Colfax is the junction of two railroads, where a large amount of travel passes over the Nevada County Narrow-gauge road, up into northeastern California. We hope to see some enterprising hotel man open up a good house, which would be appreciated by the people of Grass Valley, Nevada City, Downieville, and a host of commercial and mining towns, as well as the commercial tourists, who daily visit this upper country. Between Colfax and Auburn is

#### Clipper Gap.

Where the famous Clipper Gap iron mine is located, the works of which were burnt down a short time since, but has recently been rebuilt much larger than formerly. This iron is known to be the best in the market. We saw stone plate made of this iron by G. H. Tay & Co., at their works in Alvarado. It was malleable and flexible. At

#### Lincoln.

Which is on the Oregon division of the C. P. R. R., 29 miles north from Sacramento, are located the extensive potteries of Gladding, McBean & Co. The works are situated on the edge of town, and the immense clay bank is located only a mile away, on land owned by Towle Bros. The clay is in a hill; it can be easily extracted and is of the very best quality for sewer pipe, chimney tops, fancy urns, flower pots and domestic ware of all kinds, which are moulded and burnt in the most approved manner.

At this place is also a coal mine, which yields very fair coal for steam engines and other uses.

Seven miles further north, on the same road, is the village of Sheridan, located in a farming region, and containing a fine flour mill.

#### Roseville.

The junction of the railroad, 18 miles northeast of Sacramento, has a population of 350. The farming community is thriving. The soil is principally a reddish clay, except along the creek, where it is a sandy, black loam. The town supports four general stores, owned respectively by M. Luveaus, W. A. Thomas & Son, J. D. Pratt and W. A. Branstetter. One hardware, tin and stove store is kept by W. P. Cole.

There are two hotels, The Junction House, on the west side of the depot, has accommodations for from 35 to 40 guests, and is run by J. B. Brunstetter. The other, on the east side of the railroad, is the Golden Eagle, kept by W. Scott.

There are a number of other towns in the county, such as Ophir, Alta, Blue Canyon, Emigrant Gap, Gold Run, Forest Hill, Pico and a host of other little mining camps.

The census of 1890 gave Placer county a population of 14,226, which perhaps, would reach 14,500

at present. The county Assessor estimates that there are about 300,000 acres of fruit and grain land susceptible of cultivation, a great portion of which is yet in a natural state.

#### THE ARTESIAN BELT.

The boundaries of the belt are, as yet, very uncertainly defined. From the attempt which have already been made to locate them it is quite evident that the belt has nearly the same general direction as the valley and the mountain ranges, i. e. from the north-west to the south-east, though it swerves to the westward somewhat faster than do the latter. The line of the Southern Pacific Railroad has been thought to mark the eastern limit of the belt with tolerable accuracy, though a few very small wells have been obtained a short distance east of the track in the vicinity of Tule river. At Tulare City, and even two miles east of this point, wells have been bored which undoubtedly tapped the same stratum of water that supplies the flowing wells further west, but the water only rises in them to within three or four feet of the surface and will not flow. There is a small flowing well two miles west of Tulare City, but it is very doubtful if one could be obtained much nearer. Of the western boundary of this belt nothing is known except that it certainly extends to the lake, and perhaps far beyond; and its northern and southern limits are alike unascertained. This much, however, has been proven beyond question: There does exist a tract of as fine land as can be found in the entire State of California, or anywhere else, not less than 25 miles in length and from twelve to fifteen in breadth, upon which no one has failed to get artesian water who has made the trial for it, and it is extremely likely that as additional wells are bored in other localities, the limits of this tract will be still further extended. Indeed, it is the general opinion that good flowing wells may be had almost anywhere in this vicinity by boring to a sufficient depth, but as no wells have yet been sunk much deeper than 800 feet, this is simply a matter of conjecture, supported by inferences based upon the configuration and character of the country.

We believe we are perfectly safe in saying that within the limits of this belt can be found good land for 4,000 forty acre farms, which, if we allow five persons to each family, will support a population of 20,000 people without crowding any one.—*Tulare Register*.

#### IS IT THE PLACE FOR A POOR MAN?

How frequently the remark is made of Riverside and other places in Southern California where land is sold at \$100 per acre and upwards: "This is a good place for a man with plenty of money, but it is no place for a poor man." If by "poor man" is meant a man poor in energy, management and resources, then the remark is true, but when applied to a man of energy and ambition it is not true, even though he have little or no money.

To illustrate the point by a practical example, we mention the name of A. B. Combs, well known to the citizens of Riverside. He came to this valley several years ago without means. He was crippled with rheumatism and could get around with great difficulty. The acute character of his disease became better, but he was left crippled for life, and well advanced in years. His family consisted of himself and wife. He rented a house and worked when able for others for wages. Three years ago he purchased a two and a half acre town block that had been partially set to orange trees. He commenced improving the same when he had time. Last year he built a nice, comfortable home and moved into it. This past year the exhibit from his place of 2½ acres, shows as follows:

RECEIPTS.	
140 seedling orange trees sold from nursery.....	\$ 330 00
150 budded orange trees.....	150 00
29,200 Salinas grape cuttings.....	306 00
17,500 Mineral cuttings.....	44 50
400 other cuttings.....	8 00
100 boxes of raisins—net.....	300 00
Total receipts.....	\$1,138 50
EXPENSES.	
Cultivating.....	\$ 29 00
Water.....	10 50
Irrigating.....	14 00
Pruning.....	30 00
Hauling.....	4 00
Picking and hauling grapes.....	25 00
Total expenses.....	\$ 112 50

This gives a net income for the year of \$1,026.—*Riverside Press*.


#### ALFALFARIA.

In contrasting this land of grass with alfalfa, the Fresno *Expositor* says:

Alfalfa, although an annual, will, with the same care that is bestowed on alfalfa, yield more and better hay, every season, than it. If cut and watered it will give as many crops per season as the alfalfa, and it will be on hand with a good crop of feed earlier in the spring than any other grass. Its ability to stand drought was never more thoroughly tested than during the present season in Fresno. While all the other native grasses were completely dried out, the alfalfaria struggled along, and when the rains came at the close of March, it sprang up and is now covering the ground with a luxuriant carpet of green, affording good feed to the cattle and sheep.

## THE CALIFORNIA POWDER WORKS.

**Santa Cruz Gunpowder.**



**HERCULES AND MINING POWDER.**

**Pacific Rifle and Pistol Powder.**

**ROUND GRAIN,**  
Bright Glaze, in Iron and Wooden  
**SHOT,**  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.

PRINCIPAL OFFICE,  
**No. 230 California Street,**  
SAN FRANCISCO, CAL.

**J. D. SPRECKELS & BROS.,**  
Shipping and Commission Merchants,  
HAWAIIAN LINE OF PACKETS.

325 Market Street,  
SAN FRANCISCO.

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the  
**STANDARD SYRUP,**

A SUPERIOR ARTICLE,

Put up in Barrels Expressly for Home Consumption.

ALSO,  
**EXTRA HEAVY SYRUP,**

In Barrels for Export.

**REFINED SUGARS,**

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.

## COMMERCIAL INSURANCE COMPANY

OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, Dec. 31, 1882, \$376,978.08

Losses Paid Since Company was Organized, \$867,528.70.

JOHN H. WISE..... President  
CHAS. A. LATON..... Secretary

**OFFICE.**

No. 405 California Street, S. F.



## A LARGE ESTATE IN SOUTHERN CALIFORNIA.

The possessions of some of the great land owners of this section are prodigious. It is a favorite story that certain men are able to drive a herd of cattle from the northern counties of the State to San Diego at its extreme southern limit, and quarter the animals every night upon their own territory. Haggis, Carr, and Tevis, whose property I was privileged to examine considerably in detail, have some four hundred thousand acres. Much of this was secured for a mere trifle while in the condition of waste land, and afterward redeemed. A neighbor who had acquired a great estate of a similar kind, mainly while holding the post of Surveyor-General of the United States, drew forth one of the best homages of President Lincoln. "Let me congratulate you," said Lincoln, as this gentleman was retiring from office under his administration. "You have become monarch of about all you have enjoyed."

The owners do not often live upon their estates, but leave them in the hands of managers, and draw the revenues. The Haggis, Carr and Tevis property is divided into a number of separate ranches, each with its resident superintendent. The Bellevue Ranch, so called, is the centre and focus of authority for the whole. Here is the residence and office of the general manager, and here are assembled a force of book-keepers, engineers and mechanics, who keep the accounts, map, plan, supervise, construct and repair, and give to the whole the clock-work regularity of a great commercial enterprise. The numerous buildings constitute a considerable settlement. There is a "store" of general merchandise and supplies. A dormitory and a dining-hall have been erected for the laboring hands. A tower-like water-tank, surmounted by a windmill, and accommodating a milk-room below, rises at one side. There are shops for the mechanics, spacious barns, and long sheds filled with an interminable array of agricultural implements. It is worth while to take a walk past this collection of reapers, threshers, sulky plows, and rakes, and study out their uses. The immense "header and separator," rises from the rest like some awe-inspiring leviathan of the deep. A whole department is devoted to the "road scrapers," "buck scrapers," and plows of various sorts used in the construction and dredging out of the irrigating ditches. The soil is, fortunately, free from stones, and the work is for the most part quite easy. One enormous plow is seen which was designed to be drawn by sixty yoke of oxen, and to cut at once a furrow five feet wide by four deep. Like the famous steamship Great Eastern, it has defeated itself by pure bulk, and is not now in use.

More than \$500,000 have been expended on the great estate in the item of fencing alone. An average of four hundred laborers is employed, and in the harvest season seven hundred. The rate of wages is quoted at from two and a half to three dollars per day for mechanics, and one dollar per day to common hands. This seems low as compared with information from other sources, and that which appears in the chronic complaints of the scarcity of farm labor in the California papers.

No great portion of this domain appears to be now in the market at the disposal of settlers of small means, though the intention is avowed of offering some of it in this way when all shall have been thoroughly reclaimed. Numerous tracts, however, are occupied on very favorable terms by settlers, as they are called. They take from 120 to 600 acres. Very many of them are Portuguese and Italians. They are usually unmarried, work in companies of from six to fifteen persons, and wear the red Garibaldi shirt. The renter is provided by his landlords with a house, an artesian well, a credit to a moderate amount at the general store, and the use of some cows. He has the milk of the cows, but must give their increase to the estate. His lease runs three years, and he pays as rent one-third of his crop. Instances of large profits are frequent among these persons, and no doubt the same opportunities are open to others who may wish to follow their example.—*Wm. Henry Bishop in Harper's Magazine.*

## NOT SO EASILY OVERDONE.

A great many people think that the grape business is likely to be overdone. There appears to be no reasonable grounds for such fears, especially when we remember that in the old and thickly settled districts of France, where viticulture is a specialty, grapes are selling at from four to twelve cents per pound, and at these rates, vineyardists often realize as high as \$5,000 per acre. In this result is seen the benefit of small farms, thoroughly worked and highly cultivated.—*Yulore Register.*

## STUBBORN RAILROAD WORK.

A writer in the *Sacramento Bee* has the following, showing the many difficulties which the railroad builders encounter in penetrating a California wilderness:

The Central Pacific Railroad Company is just now engaged in about as tough a little piece of road building as it ever engaged in since the days when it commenced to hew down the hills and exalt the valleys for the track on this side of Colfax. They are building the line north from Redding in California to the Oregon border, about 150 miles. It is said then engineers estimate that the grading alone will cost \$30,000 per mile. They have two ranges to cross, and one is the northern backbone of the big Sierras. It is no child's play, surely, says the *Salt Lake Tribune*, to lay a smooth track over the route, but it must be done in order to give San Francisco and Portland direct, swift land connection, and the trade between the two cities is something so tremendous now that it is time that a part of it was withdrawn to a land route. Then too, when the Northern Pacific shall be finished, a great many people will want to go by that route, and will want all rail connections with San Francisco.

Again, without the completion of the road, the Chicago merchants would, on the completion of the Northern road, find markets in Oregon, clear down to the California line, and in the interest of San Francisco the connection of the link between Redding and the southern terminus of the Oregon and California road must be made. When completed it will be a charming region to ride through. The road will run right, at the foot of old Shasta; it will cross some of the most beautiful rivers in the world, particularly the Clifton, and will pass through a forest of mighty timber than ever a railroad penetrated before. Sugar pines six, seven and

## A SMALL FARM.

As an evidence of what can be produced on a small farm, we publish the following from the *Dixon Tribune*:

Dr. William Alexander owns a beautiful forty-acre tract, situated half a mile south of Batavia. The Doctor's farm is a delightful study to those who love to look upon varied and beautiful vegetation. A large dry slough, running nearly north and south, divides it almost equally. From either bank, the land slopes away gradually, and the soil is rich and productive. It is beautifully laid out, and now that the vines are putting forth their buds, and the trees are clothed in a rich and umbrageous foliage, the scene is one of great beauty and magnificence. The farm is devoted exclusively to fruit. There are about 14 acres of old and still bearing vines, mostly of the Mission Variety. Of these, 7000 vines are about 15 years old, and 500 are about 20 years old. They are thrifty, and show no signs of decay—indeed, from one acre of the oldest vines, the Doctor last year picked nine bins of grapes, and Mr. Chas. Harbison picked ten tons from the same vines, three years ago. These are perhaps the heaviest bearing vines in the county, and for aught we know, in the State. Among the old vines there are also 300 Muscat, and 500 of other foreign varieties. About a year and a half ago, the doctor planted 1800 Zinfandels, and 2500 Muscats, and these are in prime condition. The following year he added 600 Tokays, and these are also doing well. It is the intention next year, to put out 12 acres more of wine grapes. When the reader remembers that these wine grapes sell readily for \$30 per ton, and that \$8 per ton will cover the entire expense of picking and shipping, some definite idea of the profits derived, may be formed. The Doctor also has 300 almond trees, 50 apple

## A MOUNTAIN HOME.

The Los Angeles *Herald* gives the following account of a visit to a mountain home built by sheer industry and hard labor:

During our recent trip to the San Fernando Valley we encountered an experience that is calculated to encourage those who are inclined to build homes in our mountain nooks and canyons. Thinking that we had had enough of wheat and grain, Gen. Al. Workman, when he reached the old stage road through the Santa Susana Pass, told us that he proposed to treat us to a sight of the mountain home of M. C. Johnson, a Dane, at one time a teamster with the San Fernando company. Mr. Johnson has established himself at the foot of the highest peaks of the San Fernando mountains. He is nineteen hundred feet higher than the plain, and his home is reached by a roadway whose construction is a miracle. This man and his sons—both young men—have created roadways which represent more real labor than all the Boards of Supervisors of Los Angeles county have put on all the roads of this opulent county during the past ten years. We knew what we are talking about because we have been over them. Our ascent, in a driving rain, was truly an up-hill operation. But at last our labors were rewarded, and, right at the foot of one of the highest peaks of the San Fernando mountains, a charming scene burst upon our vision. On this elevated coign of vantage Mr. Johnson has created an ideal mountain home, as perfect of its kind as Mr. L. J. Rose's Sunny Slope or Mr. Coggeshall's Sierra Madre villa. Mr. Johnson has not, like those gentlemen, spent hundreds of thousands of dollars upon his place; but both of them, were they to visit this mountain eyrie, would cheerfully admit that this energetic Dane, considering the difficulties he had to encounter and the means at his

disposal, has accomplished greater results than they. He has an elegant home, a hundred stand of bees, and appointments whose exactness demonstrates him to be possessed of a high order of mechanical ingenuity. Year by year he will go on subjugating the chaparral until nearly his whole hundred and sixty acres will be under an elaborate state of cultivation. In his search for water, he simply tunneled into the mountain's side, through the solid granite, being rewarded by a stream which runs fully fifteen thousand gallons a day. He has another stream of similar volume. He has constructed reservoirs, which he has stocked with carp. This indefatigable horticulturist sells his fruit and garden truck to the farmers of the valley, and is as prosperous as he is independent. He has accomplished wonderful things. Other men have shown what can be done in the foothills. Johnson, by creating a paradise on the mountain's summit, has opened new possibilities to the settler in this section.

## DANA ON CALIFORNIA.

The following is a portion of an interview that, recently, took place between the distinguished editor



LAKE TAHOE, CALIFORNIA.

eight feet in diameter and 300 feet in height are as thick as blackberries along the route for miles.

From San Francisco to Portland, by rail, the distance will be about 660 miles. The steamers that they have in the trade between the two cities make the voyage now in 48 hours in good weather; probably the trains will not shorten this more than 15 hours, which would be no objection as far as freighting is concerned. The passenger business will mostly go to the cars for there is only now and then a person who desires to cross the Columbia bar just for the pleasure of the journey. The Central Pacific people have performed things which have made more noise than the opening of this road will, but they have never given any better exhibition of sturdy courage and pluck than the opening of this road will present.

## CALAVERAS COUNTY MINES.

From an article in a recent issue of the *Calaveras Chronicle*, we take the following items: Mining properly is looking up now in this county, and we believe that the prospects were never better for this main branch of our resources than at present.

In the vicinity of Angels there is now considerable activity, and money is being invested on a large scale. There are several mines there that we believe are destined to last for years, and yield thousands of dollars to the investor. The men that are now operating have evidently come to stay, as they come with the coin, and not mere talk, as has been too much the case heretofore.

To-day our mines stand as well in San Francisco as they do on the coast, and large sums of money have lately been brought into the county in payment of mines, and for building mills and reduction works.

Subscribers for THE RESOURCES OF CALIFORNIA.

## STARTING A NEW HOME.

The following article, which we take from the *Rural Californian*, shows how to make a living from the start on a new home:

It is easily done in Southern California. No one should buy land without water for irrigation, and with that, alfalfa and abundance of other green feed can be raised, and the family put upon a self-supporting basis at once. It has been abundantly proved by experience that with three or four good dairy cows, 100 hens, and pigs enough to consume the dairy slops, that a family can be supported in comfort whilst waiting for the fruit orchard and vineyard to come into bearing. In addition to these the spaces in the orchard between the trees can be utilized for the growth of potatoes, cabbage, peas, squash and other vegetables, not only without injury to the trees but with advantage, as the irrigation and cultivation required to produce them are just what the trees want and would have to have if the ground remained vacant. The sale of the surplus butter, poultry, eggs and vegetables will amount to a considerable sum and easily pay the grocery and clothing bills if economy is used.

of the New York Sun and a representative of the *Chronicle* of this city:

"This is, I suppose, your first visit to California."

"Yes."

"I trust it has proved agreeable?"

"It assuredly has. It has been both instructive and delightful. It is important that a man who desires to understand the country thoroughly should see the South, the country along the Mexican border, and the States of the Pacific. These are all peculiar and they contribute their own special elements to the general power and prosperity of the country."

"How have you been impressed with the peculiarities of climate, soil and scenery?"

"I am greatly struck with the richness of the soil in all parts of the State which I have visited. The only thing necessary to make California one of the most prosperous of agricultural regions is an abundance of water, and this seems to be pretty well provided for by nature."

"You think, then, that the State has a future?"

"Yes, and a glorious one. California is undoubtedly bound to be one of the greatest States of the Union. The variety of its products, the beauty of its climate and the fecundity of its situation make it one of the most favored regions of the world."

## WATER SUPPLY.

Some of the people of this county are agitating the question of the formation of reservoirs in the mountains for the storage of surplus water until such times as it is needed upon the plains. The reports of the State engineers upon this subject are very favorable to the project, and this plan will probably be adopted in the near future.—*Yulore Register.*



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 340 Sansome St., Halleck Building.

ISSUED MONTHLY

Terms.....\$2 per Annum.

SAN FRANCISCO.....JULY, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

First Page.—Nevada County. Continued.  
 Second Page.—Nevada County. Continued.  
 Third Page.—Nevada County. Continued.  
 Fourth Page.—Mountain Marvels.—Santa Clara Valley.—Ventura County's Inducements.—Sierra Mining Hints.—Riverdale.—The Thermal Bath for Fruit.  
 Fifth Page.—Placer County. Continued.—The Artesian Well.—Is it the Place for a Poor Man?  
 Seventh Page.—A Large Estate in Southern California.—Sinnott's Halfbred Work.—A Small Farm.—Starting a New Home.—Deeds on California.  
 Eighth Page.—Some of California's Advantages.—Fruit Lands.—Fruit Canners.—Home Production and Foreign Importation.—A Prosperous State.  
 Ninth Page.—Victoria to Francisco.—Our Priceless Climate.—Grand Carnival and Bal Masque.—The Official Returns.  
 Tenth Page.—The Grand Army.—Artesian Wells.—The Placer Foot Hill Section.—Fruit Tree Culture.  
 Eleventh Page.—A Practical Test.—Gold From Black Land.—The Gold Blossom.—Advice to Farmers.—The Date and the Prune.—Yolo and Solano Crops.  
 Twelfth Page.—Silk Culture.—Home Wines.—Something About Salmon Fishing.—A Favored Locality.  
 Thirteenth Page.—A Rapidly-Growing Section.—Mining in El Dorado.—Good Grape Land.—Oranges in Butte.—A Favored Climate.—Copper in Calaveras County.  
 Fourteenth Page.—The Dividend Result of the Mining Industry for 1882.—The Orange Trade.  
 Fifteenth Page.—Humboldt County's Outlook.—Fruit Canners.—Cost of Hop Culture.—Farming in California.—A Beautiful Panorama.—A Valuable Coal Mine.

## SOME OF CALIFORNIA'S ADVANTAGES.

We can conscientiously declare that California offers to farmers greater advantages than any other State. The average quality of the soil is better than that of most others, and it requires far less labor to prepare it for cultivation. It is ready, generally speaking, for the plow without any previous expenditure of time and labor. Besides this, our climate is exceedingly favorable for agricultural pursuits. Not one-tenth of the expenditure for outbuildings is requisite that is considered indispensable elsewhere. An immigrant can purchase a new farm, plow, sow, reap, secure and market his crop of grain in less than twelve months. As to abundance and variety of products no State can rival California. There is enough land to support a population greater than any other State the Union can boast of. We can not doubt but the immigration would be many fold greater, than it now is, if the people at the East and in Europe fully comprehended the facts. It would be difficult, without much reflection, to arrive at an adequate idea of the power and wealth which will crown our State, in the future, by the development of her wonderful resources. In the language of another: "In a territory so vast as the imperial domain over which her government bears sway, with its variety of soil and climate, its coast line, bays and rivers, and its wealth of mines and forests, it is natural that there should be found an almost indefinite number of inviting lines of investment for labor and capital."

Indeed, those of us who are the most familiar with this subject, hardly begin to appreciate the magnitude of the wealth of our heritage. Rapid as has been the growth of California, in power and influence, it can be said that the outer surface of her boundless wealth of resources has hardly been more than touched.

When we remember that California contains an area well nigh three times as great as the New England States, greater than all the Middle States (with Maryland and West Virginia added), and greater than England, Scotland, Ireland and Wales combined, by 70,000 square miles, we begin to have some conception of the grandeur of our domain. And this will be more fully impressed when we reflect that, within this domain, more than twenty States of equal size with Massachusetts

could be created, or about 140 States of the size of Rhode Island. And when we consider the capacity of this vast area for sustaining population, we acquire a still clearer idea of the great future of California. No portion of it is inferior, in this particular, to the populous State of Massachusetts; on the contrary, in every particular it is acknowledged to be superior. Yet it is shown that when our State attains a population equal in numbers to the square mile with that of the old Bay State, its inhabitants will number 33,000,000, or a population of more than two-thirds of that of the United States.

In our broad State, where almost every production under the sun can be raised, and where almost every industry can be successfully prosecuted, there is an opportunity for all intending immigrants. But it must be understood that, notwithstanding the wonderful advantages California offers, labor, enterprise and intelligence must be called into requisition.

## FRUIT LANDS.

The San Jose Mercury, after interviewing several owners and dealers in green fruits, reaches the conclusion that every foot of ground fit for fruit growing is being planted as rapidly as the nurseries can furnish the stock, and the means of the owners will permit. That journal thinks it is only a question of time, and a very short time at that when Santa Clara Valley and the foot-hills surrounding it will be one immense orchard, yielding large revenues to its hundreds of thousands of different owners. The fruit growers of Santa Clara county do not seem to be troubled with any fears of coming to grief from overproduction. The enterprising city of San Jose already boasts of having two large canneries in its midst, and is talking of erecting one or more at an early day. The demand for their canned fruit is greater than the supply. There is no doubt but this will be the case in every fruit-growing district in the State as fast as canning factories are established. In our opinion to much good fruit cannot be raised. All fruit growers of intelligence know that as yet, the local supply has never exceeded the demand, in reality, and that as soon as our facilities of transportation increase, so will the demands for our fruit multiply. We have only to let it be known that the fruit is here, to open up markets for all that can be raised in the State.

## FRUIT CANNERIES.

The local papers of the interior contain frequent mention of the establishment of fruit canneries in their respective localities. The prospect for the coming season is said to be very bright. It has been estimated, by those largely interested in the business, that the present year, Santa Clara, Los Angeles, Sonoma, Napa, Sacramento and San Joaquin counties will produce between \$2,000,000 and \$2,500,000 worth of fruit and vegetables that will find a market in a preserved form directly from those counties, while the product of the San Francisco canneries will largely increase the estimate.

Canning fruit is destined to become a great industry in this State. By preserving fruit by this method it can be sent abroad to nearly every port in the world with which we have commercial intercourse. Referring to California canned fruits, the Boston Journal remarks "that only the perishable nature of the goods prevents successful competition with Florida and other southern points, but the case is different with preserved fruits, canned vegetables and dairy products, and that the time is almost within sight when the Pacific Coast will compete with the entire country in all these matters, and greatly to the advantage of consumers everywhere."

## THE STATE'S GREATEST NEED.

California needs immigrants, not only those who come here to spend wealth accumulated elsewhere, and live in our beautiful cities, and enjoy our landscape and climate, but those who have wives and children for whom they must earn a living and make a home. Our large tracts of land will be subdivided under the pressure of a large and willing population which demands them for homes. We want a population of agriculturists, people of rural tastes and instincts, who know how to live on the soil and direct its fruitfulness to their profit and the gain of the State.—Oakland Times

## HOME PRODUCTION AND FOREIGN IMPORTATION.

In the matter of production many of our people are somewhat peculiar. For instance, they will send abroad for goods in numerous branches of trade, and pay duty on them, when they can obtain those of a superior quality, at a less price, which are manufactured at home. But we are glad to learn that within a brief period, an improvement in this respect to some extent, has taken place. As an illustration: In the importation of foreign wines and brandies, a great change is now going on. It is gratifying to us to be able to state that California wines and brandies are beginning to be appreciated at home; consequently the quantities now imported are much less than formerly. Notwithstanding experts and connoisseurs pronounced them superior to those imported, our people persisted, for a long time, in sending their money away from home and out of the country for an inferior article. There seemed to be something singularly captivating about a French label. But the sensible portion of our people are beginning to get over their fondness for everything that smacks of a foreign origin. It was the same way with olive oil. It is a well known fact that some of our large hotel and restaurant proprietors would purchase this article simply because it had a foreign label on the bottle containing it, well knowing it to be an adulterated article, but they had to do it to suit their guests. Since the Kimbells' of San Diego, the Coopers' of Santa Barbara, and the Shorbs' of San Gabriel, have proven to the world that our State can produce the genuine article—one which the best judges of the old world pronounce far superior to that ever imported to this country—California olive oil is finding a ready market at home. This it has ever been and will continue to be so, until our people are educated differently. They should be taught that every article, wherever produced, should be valued and prized according to its merits.

California, as a State, is making considerable headway in her education in this respect. In this connection we cannot forbear saying that we trust our farmers, although slow to profit by experience, will, in time, cultivate and manufacture for themselves, whatever products they are now short-sighted enough to pay others exorbitant prices for. When that time comes California will be in a much more prosperous condition than she is at present.

## PROFITS OF FARMING.

Judging from the Oroville Record, farming, in Butte county, seems to be a profitable industry. That paper states that a farmer on the Pratt Grant, last year, cleared \$6,000, above all expenses, from 320 acres of summer-fallow grain. Another farmer, who rented land on the Parrott Grant, cleared \$42,000 above all expenses.

The Butte Register makes mention of a farmer who, six years ago, was not worth a dollar. He began by renting land, and he is now worth \$10,000. Another farmer, five years ago, when he moved into Butte, was \$6,000 in debt. He has paid off his debts, bought a ranch and paid \$5,000 on it, and has his stock, feed, farming implements and a growing crop. He has made in the five years not less than \$16,000 above expenses. We have no doubt but similar results can be accomplished in many other counties in the State.

## A FAVORED COUNTRY.

Californians have reason to congratulate themselves that their lines have been cast in pleasant places. Every year proves most conclusively that this Pacific Coast is one of the most favored spots on the face of the earth. The fertility of the soil, the wide range of products, the mildness and salubrity of the climate, and the absence of violent natural phenomena, place it in the front rank. We have an occasional harmless tremor, and sometimes our valleys are overflowed, but these are nothing compared with the violent storms and the great floods of the older States and Europe, which result in great loss of life and destruction of so much property. The winter just passed has been remarkable for violence by sea and land. Scarcely a day has passed that some disaster has not been chronicled. While this has been the case, there has been nothing to endanger life or property here or to disturb our serenity.—Sonoma Democrat.

## A PROSPEROUS STATE.

As compared to many of the Atlantic States, California is certainly in a gratifying condition of prosperity. Besides being assured of harvesting good crops, it is also highly gratifying to know that California is now receiving an influx, of from 1,200 to 2,000, of the most desirable class of immigrants each week. People will continue to come here for many years, and those born in the State will nearly, if not quite, equal those who may leave it. California is slowly but surely settling up; towns are being built; the waste lands are being developed; new industries are springing into existence; outside capital is being invested in every mineral and agricultural district. Besides, in addition to the increase of ordinary immigration, the State is becoming a resort for many tourists. A large number of visitors will come here from the East this summer; and they will do more than leave money. Some of them will make this State their permanent homes. They will have considerable to say on their return, of our climate, our soil, our productions, and the ample room California has for millions of settlers. These visitors will only act as an advance guard for the hundreds of thousands that will come here within a few years to be permanent settlers.

There is no doubt, whatever, but California is now enlisting more interest abroad than at any previous time since she became a portion of the Union. And there are satisfactory reasons for it, among which we will mention the following: There is more prosperity and more rapid development of her resources, in proportion to the number of inhabitants, than can be found elsewhere. Surely, then, no other land in the world, to-day, in point of climate, richness of soil and natural advantages for great business enterprises, holds out so many inducements to immigrants, whose object is to settle down permanently and make homes for themselves, by industry and perseverance.

## NEW WHEAT.

The first new wheat of the season reached this market from Solano county some three weeks earlier than the first that was received last year. Threshing is now generally under way, and will not be completed until October. The yield is turning out better than was anticipated a short time ago.

## NORCROSS &amp; CO.

The old and well-known house of Norcross & Co., was established in the year of '49 by the present senior member of the firm, Col. Daniel Norcross, and stands at this day pre-eminently the head in their peculiar line of business on the Pacific Slope. Some of the most elaborate and magnificent costumes for the members of California Commandery, No. 1, K. T., have recently been manufactured by this house, excelling anything else ever heretofore attempted as will be seen in the procession of the coming Couverture of Knights Templar in this city, during next month. They are also manufacturing elegant and superior outfits, of the regulation style, at less price than can be imported from the East. This branch they have made a specialty. In which they have proved a perfect success. Odd Fellows' regalia of the most exquisite designs, in embroidery and workmanship, are also a leading feature in their manufacturing business.

Paraphernalia of every description is to be found, in this old established house, of their own manufacture, in quality much superior to Eastern importation, and at equally low prices.

Another branch of industry is the manufacture of flags and banners; in this line of business the house has become justly celebrated for the style and character of the many beautifully-designed banners and flags furnished by their establishment. Army and Navy embroideries are executed in a highly artistic manner, and everything pertaining to military or naval goods, such as awards, belts, shoulder knots etc. etc., may be found at the pioneer establishment of Daniel Norcross & Co., Masonic Temple, No. 6 Post St., San Francisco.

## HOW WE PROSPER.

An item appeared in the Herald, recently, to the effect that probably 270 dwelling-houses had recently been and were now being erected in Los Angeles. At the time it was considered a careful estimate, but it is far too low, as is evinced by a thorough tour through the city, in which the new residences were counted. The total number is 334, all of which have been erected within nine months, most within five and many barely started, or not yet finished. They are of all sizes and shapes, from a shanty up to elegant residences.—Los Angeles Express.

## PRICE OF LAND.

There was, says the Butte Record, 1,610 acres of the Furwell ranch, Butte county, sold last week for \$68,000. This is equal to \$43 per acre.



## VITTORIA TO FRANCESCO.

Parting with friends is temporary death,  
As all death is. We see no more their faces,  
Nor hear their voices, nor see their smiles,  
But messengers of love give us assurance  
That we are not forgotten. Who shall say  
That from the world of spirits come no greeting,  
No message of remembrance? It may be  
The thoughts that visit us, we know not whence  
Sublimed as inspiration, are the whisperers  
Of disembodied spirits speaking to us  
As friends, who wait outside a prison wall,  
Through the barred windows speak to those within.  
As quiet as the tranquil sky above me,  
As quiet as a heart that beats no more,  
This convent noise. Above, below, all peace  
Silence and solitude, the soul's best friends,  
Are with me here, and the tumultuous world  
Makes no more noise than the roundest planet,  
O gentle spirit, into the third circle  
Of heaven among the blessed souls ascended,  
Who, living in the faith and dying for it,  
Have gone to their reward, I do not sigh  
For those as being dead, but for myself  
That I am still alive. Turn those dear eyes  
Once so benignant to me upon mine eyes  
That open to their tears such uncontrolled  
And such continual issues. Still unwept  
Have I wept, I will weep, I will weep at last,  
Have I wept, I will weep, I will weep at last,  
A few more clappings of these convent bells,  
A few more prayers, a few more sighs and tears,  
And the long agony of this life will end,  
And I shall be with them. If I am wanting  
To be with them, as thou art to mine,  
Have patience; I will come to thee at last.  
Ye friends that tetter in these cloister gardens,  
Or wander far above the city walls,  
Bear unto me the love of those that ever  
Or speak of think of him or weep for him,  
By unseen hands uplifted in the light  
Of sunset, yonder solitary cloud  
Flows with its white apparel blown abroad,  
And wafted up to heaven. It fuses away  
And melts into the air. Ah, would that I  
Could thus be wafted unto thee, Francesco,  
A cloud of white, an incorporeal spirit!  
—Longfellow's "Michael Angelo," in February Atlantic.

## OUR PRICELESS CLIMATE.

[Written for THE RESOURCES OF CALIFORNIA, by James C. Kemp.]

Climate is the factor that irrevocably decides, not only the status, but, to an eminent degree, the manners, customs and general characteristics of every people. It holds all with a power as positive as the law of gravitation, from which there is no escape, making of us either miserable, worthless do-nothings, on the one hand, or go-ahead, accomplished men and women, on the other.

It is the climate of England that made her the exalted nation she is, for had it happened to have been a counterpart of that of Venezuela, for example, her immense coal deposits and iron mines would have availed her but little or nothing, and the proud, lordly Briton would never have been heard of.

It was, too, the rugged climate of New England that stamped its impress upon the Colonists, inspired the spirit that brought on the Revolution, and has since introduced American ideas and products of Yankee ingenuity into every nook and corner of the civilized world.

It is said that every available spot for a summer residence, upon the Atlantic Coast (from Chesapeake Bay to New Brunswick), has been bought up by the wealthy classes; and why all this, if not for the sake of climate, the land being too poor for pasturage, and, intrinsically, almost worthless.

Climate gives us the grains, vegetables, fruits and flowers of the temperate and tropical zones, or, on the contrary, the blubber, frozen fishes and icebergs of the frigid North; inspiring to noble action, in the one case, and condemning to a state of wretched, filthy misery, in the other.

It is safe to assume, that when with magnificent climate, is combined a most prolific soil, great extent of mineral resources (including the precious metals), water power beyond all precedent, and a geographical position the most central and commanding upon the whole globe, the locality so favored must, naturally, rise to a status of commercial, mechanical and productive grandeur, the like of which has never yet existed in any period of the world's history.

This is the precise situation in California to-day, and, when placed in comparison with that of any other section in the known world, the difference is so astonishing that her citizens are fully justified in every word or line they have ever uttered or written in praise of the climate, wonderful possibilities, immense resources and manifestly brilliant future of their adopted State.

There is still another great fact that every person should know, and it is this: We are almost totally exempt from every form of physical disturbance; our earthquakes, of which as much has been said and written, are, when placed in comparison with those of other localities, scarcely worthy of name. I have resided here since September, 1849, and experienced every one of any consequence dur-

ing that period, know exactly what I am stating, and am free to declare that the published accounts have, as a general thing, been gross, comical and exaggerations.

Thunder and lightning occur here only once in a great many years, and then it is on a par with that caused by heat in the Eastern States, and for that matter, to all intents and purposes, the statement can be made that we do not have either. Hurricanes, tornadoes and cyclones are wholly unknown on this coast; and our severest storms are but stiff breezes when compared with those on the Atlantic seaboard.

We are, also, free from pestilence of every character; while the air which blows over the State, from off the broad and placid Pacific, comes a distance of 6,000 miles across the ocean before it reaches us. People sicken and die here, the same way they do in other parts of the world; but the native Californians, who have never known anything of the vices of modern society, live to be very aged, a native Indian named Aurora Largo (Long Hide) actually committing suicide, some four months since, who was proved to have been 150 years old. This occurred a short distance from San Diego.

It used to be a common remark that the old Californians never died a natural death, but, on the contrary, dried up and blew away. Of course, this was mere talk, yet, at the same time, it was based upon the broad truth that they were exempt from nearly every form of disease.

To my mind, the value of this almost absolute freedom from storms, pestilence, miasma, extreme cold and the many other troubles that afflict humanity in every other quarter of the globe, can not be too highly estimated.

Land becomes very valuable in the sections of a large city where trade principally centers, and fabulous prices are paid for the rarest gems of earth, and, frequently, when a business property is sold the amount paid for the good will exceeds the value of whatever is material, many times over. The climate of California, her glorious sunshine and seven months of continued fair weather, together with freedom from all the troubles I have described, are her great qualities, her peculiar characteristics, a portion of her mighty resources, and, just so sure as land now sells at \$3,000 a front foot on Market street between Third and Fourth, will the time come when every acre of her soil, fit for cultivation (from Siskiyou to San Diego and from the waters of the Pacific to the Nevada State line), command prices heretofore not even dreamed of.

Does this seem visionary? Then I would ask the reader to consider that, in all the latitudes and longitudes of the earth, there is no such other section. England, Continental Europe and the United States have their great commercial cities, where the silver dollars necessary to cover a lot would suffice to pay for it, yet these great centers often compete with each other for commercial supremacy; but this whole world—north, south, east and west—has but one California, and she no competitor, and, as a matter of strict logical sequence, she must naturally, and will, assuredly, rise far above every other portion of it.

Upon the soil of this State will be born the coming men of superior mould. I will go still further, and make the assertion that the most splendid animals and grandest types of the vegetable, cereal, botanical and viticultural kingdoms will all belong to the genus California. Here, too, is destined to be the very cream and absolute center of civilization; and San Francisco will yet be a larger city than London at the present time, and prouder still than Rome in the days of the Emperor Augustus and her era of solid marble pride—all this the result of that peerless climate, without which her grandest resources would be as nothing. Young as this city is, no other in all America has such splendid horses, and where else can be seen finer cattle than those of California, both being peculiarly free from disease; and where, too, in all the length and breadth of the country, can be found another such stock of blooded animals as that of Leland Stanford at Palo Alto?

Let the reader for a moment consider, thoughtfully, the fearful battle constantly necessary to sustain life in the far cold North, the sudden changes of weather in the Middle States, the horrible death-dealing, oppressive miasmas and yellow fever of the South, cyclones and tornadoes of the West, while here

in California all is as serene as the bosom of some romantic lake nestled amid its own eternal hills in August and September, we pursuing the even tenor of our way year in and year out, literally exempt from all such physical troubles, people of ordinary constitutions scarcely giving health a thought, looking upon it as a common blessing, in precisely the same manner they do air, light and water, simply as matters of course.

There are thousands of old miners now scattered over the Union who, when here in the early days, slept out of doors upon the bare ground for months at a time, with absolute impunity; and had it not been for the salubrity of this climate the people of that period would have perished. Lumber sold quickly at a dollar per square foot, while common ticks brought ten dollars a paper. A cross-cut saw commanded sixteen dollars a day rent, and very dull at that, for the purpose of sawing the logs in order to make shakes for the roof, or sides of a cabin.

Women, who came across the plains that season (1849), lived all winter, in many cases, in a tent shaped like the letter A, composed of unbleached sheeting, and neither took sick nor died; while the writer and his partner, on the night of November 14th, of that year, slept soundly upon the open plain, fifteen miles beyond Sacramento, amid a drenching rain, with an India rubber blanket beneath and another above us, our pony having mired down beside the trail. Such was life here in the good old days referred to, and such would, doubtless, be death in any other quarter of the world.

It will thus be seen that climate is the most priceless of all blessings, for without it there can be no general health. We, the early Pioneers, are justly proud of ours. We know it to be the very best ever given to any people, and we say to all, whose circumstances will permit, come here and enjoy it with us. Come to the great and glorious Sunset land, where the rarest of flowers bloom the whole year round. Leave cyclones, tornadoes, malaria, yellow fever, dread consumption, bitter cold and suffocating heat, far behind, and here, in bright, peaceful, golden, happy California, take a new lease of life, and go on with the flood to wealth, health and the very highest state of true physical enjoyment.

SAN FRANCISCO, July, 1883.

## GRAND CARNIVAL AND BAL MASQUE.

Col. A. Andrews, of the Diamond Palace, on the 27th inst will give another of his grand masquerade balls, at the Mechanics' Pavilion. It will eclipse anything of the kind ever given in San Francisco. The following representative citizens have consented to act on the various committees, viz.:

Invitation Committee.—His Honor Mayor Bartlett, Major-General Walter Turnbull, Major-General W. H. L. Barnes, Gen. W. H. Diamond, Cornelius O'Connor, Esq., Col. J. H. Dickinson, Hon. John S. Hager, Hon. A. J. Bryant, Hon. Geo. C. Perkins, Hon. Drury Malone, Col. A. Andrews, Col. J. P. Hoge, Col. J. H. Dickinson, Col. J. P. Jackson.

Reception Committee.—Gen. Geo. B. Crosby, Col. A. Andrews, Col. J. A. Tobin, C. A. Sparks, Esq., J. P. H. Wentworth, Esq., Gen. S. M. Backus, Col. J. C. Tucker, A. D. Sharon, Esq., H. H. Pierson, Esq., Col. J. M. Litchfield.

Committee of Awards.—Hon. D. A. MacDonald, Chairman, Major-General Walter Turnbull, Major-General W. H. L. Barnes, Gen. W. H. Diamond, Cornelius O'Connor, Esq., Col. J. H. Dickinson, Col. Richard H. Sinton, Joseph Rosenberg, Esq., Col. C. B. Maddox, B. F. Blackburn, Esq., Judge Geo. Turner, S. Mosgrove, Esq., Edward Condie, Esq., Wm. Vale, Esq., F. Marriott, Jr., J. Ross Jackson, Esq., E. W. Townsend, Esq., W. H. Barnes, Esq., A. O. Hester, Esq., Col. J. M. Donahue, J. J. E. Hawkins, Esq., Major F. N. Cleeth, J. J. O'Brien, Esq., Col. Samuel E. Beaver, Major Fred G. Smith, Louis F. Holtz, Esq., F. A. Hornblower, Esq., Col. O. Livermore, Gen. H. A. Cobb, J. G. Sala, Esq., Luigi Laviosa, Esq., Col. W. R. Suedberg, Gen. James Coy, Euston Palmer, Esq., L. G. Gardner, Esq., Col. S. P. Middleton, Edward F. Hall, Esq., Col. Gay Shirley, Senator J. J. Harrigan, Col. J. Healy, Esq., Critchley, Hon. Thornton, Esq., Hon. W. M. Pierson, Major R. H. Orton, Col. Horace D. Rantlett, Geo. E. Dixon, Esq., Gen. John McComb, L. S. Llesak, Esq., Col. J. D. Fry, A. W. Dowe, Esq., Major J. F. Cutting, L. Oute, Esq., Major J. H. Simpson, Com. Philip Calne, Col. R. H. Savage, Geo. H. Smith, Esq., George Fawcett, Esq., W. F. Harrison, Esq., Com. T. H. Allen, C. W. Killogg, Esq., George H. Dill, Esq., Hon. David McClure, P. J. Casella, Esq., John T. Hayland, Esq., John Seligwick, Esq., J. P. H. Wentworth, Esq.

Committee on Decorations.—Col. A. Andrews, H. Rodgers, Esq., Herman Jahn, Esq., James Drury, Esq., Floor Committee.—D. B. Jackson, Esq., will act as Floor Manager, and will be assisted by 60 well known society gentlemen.

The Invitation Committee have extended to Gov. Geo. Stoneman an invitation on a gold plate, beautifully engraved, enclosed in a magnificent silver envelop, to be present on the occasion, which he has accepted. This will be an additional feature of this promising and novel entertainment.

Officers for the occasion.—Col. A. Andrews, Preside-

tor and General Manager; Hon. D. A. MacDonald, Grand Marshal; J. Brolitzius, Secretary; Jos. D. Abrams, Financial Secretary, Auguste Golly and Samuel Baker, Treasurers; George O. Becker, Committee on Printing and Badges.

## THE OFFICIAL RETURNS.

## Tests of the Reaction Forty-Gunty Water Wheels by the Idaho Mining Company.

The tests of these wheels were made by the Idaho Mining Co., commencing on April 30th, and on following days, for the purpose of ascertaining the comparative per cent. of efficiency of the various water wheels, of which the result is given below. They were made in public and all had a right to compute, in making the tests a pony brako was used on wheels six feet in diameter, under a head of 380 feet and six inches, the point of connection with the scale beam describing a circumference of 30 feet. In measuring the water to ascertain the cube feet per minute discharged, a thin plate weir, without contraction, three feet and one-half inch long, was used, and the J. B. Francis formula, for discharge of water over weirs, was adopted as the basis of calculations. Those were made by Mr. George Fletcher, Auditor of the Nevada county N. G. R. R. Company, and were as follows:

## Frederick Wheel.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
144 1/2	196	70.2	4.976	163.21
358 1/2	260	84.2	"	"
361 1/2	246	80.8	"	"
338 1/2	274	84.4	"	"
298 1/2	281	76.1	"	"
358	260	84.3	"	"

Other tests were made of this wheel, resulting in an average of 82.925-1,000 horse power, utilizing 69.6-10 per cent. of the force and impact of the water.

## Polton Wheel—First Test.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
465	254 1/2	107.58	4.976	163.211
125	265	107.79	"	"
460	266	107.06	"	"
460	266 1/2	107.26	"	"

## Second Test.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
465	256 1/2	108.44	4.950	162.98
170	249	106.30	"	"
460	257 1/2	107.63	"	"
465	254	107.37	"	"

## Lower Nozzle.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
460	257	107.47	1.950	162.98
465	254 1/2	107.68	"	"

## Still Lower.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
465	253	106.95	1.950	162.98
465	256	108.21	4.950	162.98
465	240	106.26	"	"

Average horse power, 107.14-100, or 99.2-100 per cent.

## Knight Wheel—First Test.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
430	247	81.8	4.976	162.50
430	243	84.36	"	"
430	246	85.8	"	"

The cubic inches of water in this test were reckoned on the amount of minutes' inches used, allowing 1.40 cubic feet per minute for our miners' inch—this shows 77.18 per cent. of the power of the water.

## Second Test.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
460	244	100.74	6.325	160.72
475	204	89.69	6.100	160.35

Average per cent. of first test, 76.6-100. Average per cent. of second test, 71.2-100. These were the only tests made of this wheel, the nozzles breaking and having none other on hand.

## Taylor Wheel.

Weight on brakes, lbs.	Revolutions.	Horse power.	Head of water over weir, inches.	Cubic ft. of water per minute.
400	181	66.91	4.976	163.211
312 1/2	264	75.16	"	"

Average per cent. of first test, 55.1-100. Average per cent. of second test, 60.5-100. —Nevada Transcript May 19th.

## PACIFIC COAST GUIDE AND PROGRAMME OF THE KNIGHTS TRIENNIAL CONCLAVE.

Compiled and published by Ira G. Roll, contains 232 pages, is of convenient pocket size and comprises a guide to all the prominent places of interest on the coast. An interesting description is given of different routes from the East to San Francisco; of the climate of the coast and of San Francisco, with its special points of attraction, its notable buildings and its suburbs. The book contains a large, fine lithograph map of the city, with the names of streets, route of the procession of Knights Templar (during the grand parade), marked out, and many prominent places indicated thereon. The pleasure districts, including some account of the mountains, rivers, lakes, watering places, mineral springs and natural wonders receive attention. Under the head of camping, a great deal of valuable information is given for those intending to enjoy outdoor life. The guide portion of the book is concise and comprehensive. The work contains much information of interest and value to the people of the Pacific Coast and to strangers.

The book is printed neatly on fine tinted calendered paper, and bound tamandously with appropriate devices on the cover. Its very low price places it within the reach of all. Bound in fine embossed cloth, with gilt side title, 75 cents; bound in heavy paper covers, 60 cents.

## A GOOD SHOWING.

The El Dorado Republican says: We have an abundance of cheap land, cheap water power, cheap timber and cheap building stone. What we now need is a class of immigrants that can appreciate and take advantage of those natural advantages.



## THE GRAND ARMY.

The vivid contrast between a host of settlers in a new country and an army of invaders equal in number is sketched in an article in the Salt Lake Tribune of a recent date, from which we make the following extract:

The Minnesota Journals assert that ten thousand people are passing through St. Paul weekly on their way to make homes in the West. Think of it! Ten thousand a week, 500,000 per annum, passing through one city. What does that signify? It means that farther west, where all is silence now, 2,000 homes will be planted next week, and probably 100 times 2,000 acres of land be put under cultivation, land that has heretofore furnished nothing save food to wild beasts. When the smoke rises over 2,000 new homes in a week, where a week before there was nothing but barbarism, it means progress. The voices of 10,000 men and women and children all at once sounding and driving back the immemorial echoes of the wild, in music which the angel in the sun will hear in his daily round and make a note of. It means that new cities are to be created, new temples built; it means that new thrones to industry, to learning and to order are about to be dedicated. When Napoleon, with the "Grand Army" of 500,000 men, started to make the conquest of Russia, all Europe was awed by the spectacle. There was a pomp and power about the movement which the then existing nations had never dreamed of before. Five hundred thousand men, with eagles and plumes, with breast-plates and helmets, with horses, cannons, swords and guns, the terrible "Old Guard," the Marshals that had each won his place by deeds of genius and glorious valor, and with all—and in effect doubling the actual number, by the tireless energy and superhuman resources of his brain—the wonderful Emperor. That was indeed a grand picture; so grand that the white winding sheet which was made to enfold it a few months later could not hide it. Rather, it was so grand that it will move on in everlasting panorama with the roll of the years, and cause the blood in young arteries to hrob faster as long as time lasts. But after all it does not in thought compare to this army of conquest which is sweeping through St. Paul. With this army is neither sword nor plumes, but the march is fairer nevertheless. The marshals are nobler than were the mighty men who gathered around their Sovereign. In lieu of trumpet's blare there are the scream and the heavy respiration of the locomotive; the marshals are Hope and Faith and Courage and Industry; in lieu of the cannons this army carries the plow; in lieu of the sword, the reaper and mower. The conquest is aimed at the wilderness, and the intention is not to tear down, but to build up. There is to be no Borodino, no Moscow in flames, no camping in the snow which to whole squadrons is to be an eternal bivouac.—*Oakland Times.*

## ARTESIAN WELLS.

The following, from the *Stockton Independent*, makes mention of some interesting experiments on the "West Side."

The question of irrigating on the west side of the San Joaquin river is one that has been discussed a great deal. It is known that a canal running near the foothills, which could carry sufficient water, would be a profitable investment. Lately experiments have been made with artesian wells, and it is thought that this plan of irrigation can be made successful.

Crow's well at Hills Ferry, is 668 feet deep and seven inches in diameter. The flow of water from the well is sixty gallons per minute, rising to a height of twenty-eight inches above the ground. Harris' well is 330 feet deep and seven inches in diameter, from which flows 200 gallons per minute, rising two feet above the ground. Lafayette Funk, who resides near Farmington, in this county, owns a tract of land of 3,000 acres, near Grayson, on the West Side. He is making arrangements to bore several wells on this land, intending to irrigate the entire tract with six wells. This ranch is three miles long, and has a fall of twenty-two feet. Mr. Funk proposes to raise the water two feet above the ground at its highest side, and run it in canals over the entire tract. He is willing to expend \$1,500 for each well, and thinks they will be profitable at that cost. Crow's well cost \$1,125. The charge for boring wells of that size is fifty cents per foot for the first hundred feet, and twenty-five cents per foot in addition to the hundred feet. This last experiment will be watched with interest by farmers in that section.

## THE BEST VARIETIES.

G. G. Briggs, of Davisville, Yolo County, proprietor of the largest raisin vineyard in the State, has tested several varieties of grapes for raisins, viz: The Flame-colored Tokay, the Cannon-ball Muscat, the Muscat of Alexandria, the Muscatello Gordo Blanco, and has finally settled on the last named grape, the Muscatello, as the best adapted for raisins. The submerse sub-irrigation system in Mr. Briggs' vineyard in Davisville, has been extended until he has now about ten miles of main concrete 12-inch pipe and some 200 miles of distributing pipe of different sizes, made of the same material.

## THE PLACER FOOTHILL SECTION—A STRANGE OPINION OF IT.

As we approached Rocklin the country showed more signs of verdure and fertility. A smooth sward of green grass covered the graceful slopes. The ground was everywhere strewn with granite boulders; weird and fanciful in shape. Here and there picturesque clumps of live oak gave to the scene a decided park-like appearance, so pleasing and natural that art can add little to brighten the effect. Here I noticed the first foothill vineyards.

A little further up, at Newcastle, many of the sloping hillsides are covered with well trained, thrifty vines. Occasionally we passed so near them that the fragrant breath of the grape blossoms came in through the car windows. How a neatly cultivated vineyard does improve the face of the country. And how pleasant it is to see the thrifty husbandman, industriously employed in laying out the country into a garden. I cannot help thinking that the vine is the harbinger of a better civilization for California. I have uniformly noticed that vineyards and comfortable, tasteful homes go together; and when such homes embellish a country, we may be sure that order and culture are established. A nation, whose rural population is content to live in mean hovels, is certain to be behind its neighbors in intellect, in culture, in everything that distinguishes a civilized, from a coarse brutal people. Let us then gladly welcome the advent of this new Evangel in California—for it is to these that we must look for the preservation and perpetuity of our moral purity as a people. In a short time we arrived in Auburn.

Not Oliver Goldsmith's "Loveliest Village of the Plain", but a very sweet mountain town and the county seat of Placer county, withal. I spent the remainder of the afternoon rambling about the place, which by the way, has marvelously improved in appearance within the last few years.

The business portion of Auburn is located, most unpoetically, in a deep gulch where the miners first located. But the rude gold-hunter struck hard pan long ago, and on the side of their old diggings a thrifty vineyard now smiles, giving promise to the "Wine that maketh glad the heart of man." The soil in this vicinity is a deep red granite loam, admirably suited, I should say, to the growth of small fruits, vegetables and vines. Very little irrigation is necessary and water for this purpose is abundant and cheap. When I first visited this place—nearly fifteen years ago—scarcely a fruit tree and not a vine had been planted. Now the whole face of the country is being rapidly transformed into a garden landscape. After supper I sat for an hour on the broad rustic veranda at the hotel, watching the changing colors that spread over the western sky. An Auburn sunset is a picture of serene beauty.—*Cor. Napa Register.*

## FRUIT TREE CULTURE.

The following is from the *St. Helena Star*. Now that the fruit tree planting is about over for the season, we would offer a little advice to new beginners as to their management. Young trees are treated as you would a bill of corn. Good crops will do in an orchard, but sowed crops will not. It is a good plan to keep young trees mulched, and it is also good for old trees. Young trees for the first few years require good cultivation; old trees may require less; of this anyone can tell by the looks of his trees. If the color of the leaves is good, growth all right, and the trees bear well of fine fruit, they are all right, and need no cultivation; but on the contrary, if the leaves are pale and the growth feeble, and the fruit small and poor, something is the matter, which can most likely be remedied by the use of the plow and cultivator, with a good coat of manure. To judge of the condition of an orchard is much like judging of the condition of your stock in a pasture; if the stock is fat and sleek you know the pasture is all right. So with your orchard; if it is thrifty and produces well, it needs no further care. In all professions it is generally those who aim at excellence who succeed. In fruit growing the market is seldom overstocked with superior fruit; and those who, with good culture, manuring, thinning, assorting, and careful packing place the finest specimens before purchasers, obtain good prices, and ready sales, and as soon as their products become known, they are eagerly sought for on account of their excellence; even in abundant seasons. On the contrary second rate, scrubby, knotty fruit, finds slow sale at a very low price.

## RICH IN GOLD AND SILVER.

The *Fresno Expositor* gives the following account of what it calls the greatest discovery of the age:

Last Fall there was discovered by a Mr. Beck, near the summit of the Sierras in Fresno county, the largest and richest mine ever discovered in the world. The ledge is two hundred feet in width and is three miles in length. It assays \$43,000 in gold per ton and \$300 in silver, and is called the Mother of Gold. The ore resembles at a distance, when the sun shines on it, a mountain of diamonds. Several gentlemen of this city are interested in the discovery. A party of ten men, accompanied by Surveyor Davis, will start for the lummazza some time next month.

## PACIFIC COAST LAND BUREAU,

President, - - WENDELL EASTON, Auctioneer, - - J. O. ELDRIDGE,  
Vice-Pres. and Gen. Man., GEO. W. FRINK, Secretary, - - F. B. WILDE.

NO. 22 MONTGOMERY STREET,  
San Francisco, California.

Sub Agencies at Each County Seat of the State,

AGENT FOR THE SALE OF LANDS OF THE CENTRAL AND SOUTHERN PACIFIC RAILROADS.

Agency for Sale and Exchange of Farming Lands. Large Tracts Subdivided and Sold at Auction or Private Sale.

## IRRIGATED VINE LANDS

In Fresno County,

—PART OF THE—

## BANK OF CALIFORNIA TRACT,

Near the flourishing town of Fresno, but nine hours from San Francisco by railroad, and possessing one of the most beautiful and delightful climates in the world. Home for all; 6,000 acres of land divided into farms of any size. A PERPETUAL WATER RIGHT FOR IRRIGATION SOLD WITH THE LAND. Canals from the never-failing waters of Kings river. The wine and raisin crop is California's greatest bonanza. Fortunes in vineyards: \$100 to \$200 annual profit per acre. Plant only on irrigated land, for it is the most profitable, the water is the only protection against phylloxera. The land is level, slightly inclined toward the west, and ready for immediate use; the soil is a rich, sandy loam of great fertility. No fever and ague, and for throat and lung troubles the dry air of this section far excels Los Angeles or any other coast county. See United States Census reports. Seven canals traverse this tract and each owner can have water.

It is the cheapest and most desirable land now offered in this market, and we court comparison with any other land in the State. Sold, with water right and canal to each quarter section, in subdivisions any size, at reasonable prices. Payable one-fifth cash, balance in annual installments to suit.

For maps, circulars, reports and letters from resident farmers and vineyardists, and all further information, apply to the

PACIFIC COAST LAND BUREAU,

Office, No. 22 Montgomery Street, San Francisco.

Or to W. P. HABER, Fresno.

## NICOLL, The Tailor.

1867.

1883.

W. M. BRANDON & CO.,

AGENTS FOR RENTING, MANAGEMENT, BUYING, selling or exchanging real estate and other properties in city or country. Buy and sell on commission or private account. Appraisements made at reasonable rates. Money loaned on real estate, commercial paper, good notes, etc.

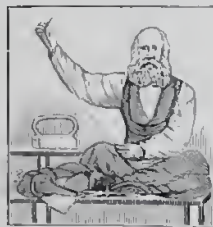
310 KEARNY ST., S. E. CORNER PINE

—BRANCH OFFICE—

Corner 24th and Folsom Sts.

SAN FRANCISCO.

Telephone No. 221, Call 3.



JUST RECEIVED

A Fine Assortment of Foreign and Domestic Woolens for this Season.

CALL AND SEE OUR NEW PATTERNS!

Suits to order, from.....\$20 00

Pants to order, from.....5 00

Overcoats to order, from.....20 00

Also—To accommodate our numerous Country Patrons visiting the city for a short time, I have added a Splendid Stock of

MEN'S, BOYS' AND CHILDREN'S READY-MADE

SUITS AND OVERCOATS.

Manufactured by themselves, after the Most Approved and Latest Styles, in Custom-Made Patterns.

WELL CUT, WELL MADE, STYLISH AND CHEAP.

You will do well to inspect before purchasing elsewhere.

CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

NICOLL, The Tailor,

PIELAN'S BUILDING,

816 & 818 Market Street,

SAN FRANCISCO.

BRANCH STORES IN ALL PRINCIPAL CITIES.

**\$3,000.** 160 ACRES OF LAND IN POINT Arena Township, Mendocino County. Title, U. S. Patent. One-half mile from the mouth of the Gualala River, and bounded on one side by the river. There is on it, three and one-half million feet of saw mill timber, consisting of pine and redwood, and 150 cords of wood standing, beside the saw mill timber, consisting of madrone and fir. One-half mile from saw mill and one mile from the landing. Four acres of this potato and vegetable land, six acres more of the same, can easily be put under cultivation, and 40 acres of upland. One dwelling house of five rooms, one boarding house, one saloon, doing a fine business, building 10x20, nicely furnished with billiard table, lawn fixtures, small barn, spring water in the house. The buildings stand on the bank of, and overlook the Gualala River, affording a very fine view. One-half mile from school, church and postoffice. This is one of the best fishing stations in State; over 1,000 salmon this winter, that needed \$1.00, and this can be easily doubled, three nets, a good boat and a lot of barrels, all to go with the place. Price, \$3,000. \$1,200 can remain on the place.

**\$1,350.** 20 ACRES OF LAND, ONE MILE from Howard's station, fronting on main road. Ten acres of the land under cultivation, and the balance heavily timbered. Place fenced into two fields. Enough timber on the place to nearly pay for it. Comfortable house of five rooms, small chicken house and a corn-crib. Well watered by running springs. Healthy locality, and splendid place for children.

**\$6,000.** 480 ACRES OF LAND, THREE miles from Fort Ross, in Sonoma County. 300 acres in pasture land, and 20 acres under cultivation. Good orchard with variety of fruit. The balance is timber land. Good house, barn and outbuildings. To go with the place, 40 head of stock, 8,000 posts, 30 cords of peeled oak wood. Nice place, good climate, and only two miles from post-office. Plenty of live water, and fish and game in abundance.

**\$3,500.** 280 ACRES OF LAND, FOURTEEN miles from Cloverdale, all deeded acres to homestead law. 100 acres of oak and pine land, consisting of timber and grazing land, suitable for hogs, live stock, and other uses. Two acres young hogs. Good house that cost \$500, barn and outbuildings. One set of blacksmith tools, plows, harrows and all farming implements. Also, to go with the place, three cows, twelve hogs, twenty Angora goats, three wagons and other articles very cheap.

**\$5,500.** VINEYARD OF 17 ACRES IN Sonoma County, all full bearing and all other varieties.

**\$3,100.** 15 ACRES FINE LAND, NEAR Petaluma. Good house; large barn; splendid supply of water; well fenced.



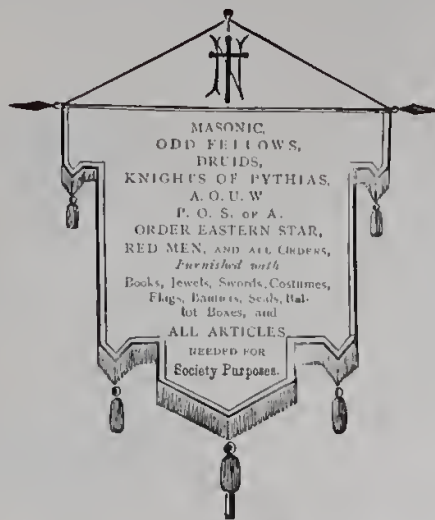
Established by Daniel Norcross in 1849.

## NORCROSS & CO.,

MANUFACTURERS AND IMPORTERS OF

### REGALIA, PARAPHERNALIA, ETC.

MILITARY GOODS, FLAGS  
AND BANNERS.



KNIGHTS TEMPLAR COSTUMES  
A SPECIALTY.

NO. 6 POST STREET,

Masonic Temple,

San Francisco.

### EDGE HILL

VINEYARD, WINE CELLAR AND  
DISTILLERY,

Near St. Helena, Napa County, California.

SCHAEFFLER'S CELEBRATED VACUUM DISTILLED

### SANITARY BRANDY

—AND—

Brands of Red and  
White Wines.

STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED

Burgundy, Bordeaux and  
Rhine Wines.

Orders Received and  
Promptly Attended to by

WM. SCHAEFFLER,

PROPRIETOR.

### HOME MUTUAL INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY, 1883.

### FIRE ONLY.

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - - - 237,982 13

OFFICERS:

J. E. HOUGHTON, President.

J. L. N. SUEPARD, Vice President.

CHAS. R. MCKAY, Secretary.

R. H. MAGILL, General Agent.

#### A PRACTICAL TEST.

A correspondent of the Auburn Argus, writing from Colfax, states that less than a year ago the residents of that vicinity commenced agitating the question of turning their supposed worthless lands to account. The writer says that Messrs. Hayford & Moore were among the first to make a practical test. They bought 80 acres of dry side hill land, on which stood a second growth of pine from one to twenty inches in diameter, besides a dense growth of underbrush through which it was almost impossible to pass. They began clearing a 40-acre patch last June by first cutting off everything, then burning the brush and with horses and stump machines they cleared the land in a thorough manner. Plowing, harrowing and preparing the ground then followed. Cuttings of seven varieties were then planted, viz.: Mission, Purple Damascus, Rose of Peru, Muscat, Zinfandel, Fleming Tokay and Green-ache. The cuttings were all steeping in a preparation made of cow-manure, bloom and water. They then received a sprinkling of bone dust. Considerable interest is manifested in the enterprise, not only because it is the beginning of what is hoped will become a leading industry, but also because it is a question here whether cuttings planted on dry side hills will grow without irrigation. That rooted vines thrive and bear excellent fruit without water is an established fact. No expense will be spared to assist nature in the way of cultivation. A force of men and horses will be kept on all summer. In the meantime, the plucky enterprise of Messrs. Hayford & Moore has stimulated others to follow their example, and about 1,200 acres of land equally well adapted to grape culture have been bought in the immediate vicinity, and all are clearing their ground preparatory to planting next season. The land is all bought in small lots of from 10 to 160 acres. This augurs an increased prosperity for Colfax in the near future. There are yet thousands of acres which may be either obtained by purchase from the railroad company, or by pre-emption from the Government. The most of the railroad land is held at \$2.50 per acre, and generally speaking, it is more desirable for one with money, as the title is perfected as soon as payment is made, and can be sold again at any time.

#### GOLD FROM BLACK SAND.

Almarin B. Paul, President of the Red Hill Hydraulic mine situated in this county, has overcome the difficulty of extracting the gold from the black sands that are washed away in the streams from the mines. The quantity and quality of gold found by him surprised all mining experts, and his enterprise promises to richly reward him. The Oroville Mercury says of this subject: From what we have recently seen we are confident that but a few years will elapse before there will occur a complete revolution in the methods of gathering gold on the Pacific Coast. The royal metal is much more abundant than has generally been supposed. Edison, when he made his test of black sands taken from the vicinity of Oroville that were so rich in gold, was not mistaken in his estimation of their value; his failure to make them profitable was only because he had not yet learned the art of separation upon a practicable scale. We are now pretty certain that this difficulty has been overcome, and in the near future the great bulk of our gold product will come from the sands that have been swept down the streams.—Oroville Herald.

#### THE GOLD BLOSSOM.

From six roastings, a little less than a ton each, of sulphurets and selected sulphurets ore, there was cleaned up at the Gold Blossom mine, last Thursday, 150 pounds of amalgam, which being retorted yielded 50 pounds of gold bullion, and this did not include what went into the settler, estimated at nearly one-third. This, raising the bullion very low, would be nearly \$2,000 per ton, and proves conclusively two things: First, that the heavy sulphureted ore of that mine, of which it bears much, is exceedingly rich in gold; and second, that the furnace they have built for the purpose of reducing the sulphurets and the sulphureted ore is a success. In addition to these results, which are encouraging of themselves, the ore put through the mill ever since the mine started up, about the first of the present year, has yielded quite satisfactorily.—Phoenix Herald.

#### ADVICE TO FARMERS.

In making calculations for next year's crops, we trust our farmers will profit by the experience of the past. They need not be told that the system of cultivating their lands in grain crops for years in succession will exhaust the fertility of the soil. This has already been done to a great extent on many farms. They need not be told that the great wheat country of the East, much of it new land and every year increasing in area, will more than supply the demands in the markets of the world. We need not tell them that to raise a variety of crops, and to change crops every two or three years, and by raising stock on their farms and feeding most of the produce raised thereon, will not only enrich their lands but afford them a good market right at home and better prices for produce so employed than in the markets of the world, taken one year with another. We need not tell them that if cattle, sheep and hogs can be raised in Arizona, Nevada, southern and northern California and freighted to San Francisco, Petaluma, Santa Rosa and other points near the bay at a profit, it will surely pay our farmers to raise the same kind of stock right at the market where they are wanted. All these things are known by the farmers, and it is about time they should begin to be influenced in the right direction by that knowledge. In the raising of fine horses for market our farmers have done and are doing splendidly, and the receipts from the sale of horses alone, within the past twelve months, of from eighty to one hundred thousand dollars show how well it has paid them. Now what we want is more fat beef, mutton and hogs. It will keep the land up and pay better than raising grain for market. No man knows until he has tried it, how much feed can be raised on 160 acres of land, or when to feed stock how much better it will pay him one year with another. We already have the best horse market on this coast, and with a little energy and change in our mode of farming, we can soon furnish the market with the best beef, mutton and pork.—Petaluma Courier.

#### THE DATE AND THE PRUNE.

Among the fruit trees which might be successfully grown in this section is the date palm, one of the most enduring and fruitful of trees. It may become as common and as fruitful in Southern California as in its native Sahara, if only our fruit growers will give attention to its planting and culture. Among other trees whose introduction and cultivation should awaken more interest is that of the prune. Experiments with this tree have been most successfully made in different parts of the State, and in size and deliciousness of flavor the fruit produced in California far exceeds that of the imported varieties. The Hungarian variety is preferred by some, and is doubtless as fine as could be obtained. The demand, in San Francisco, for California prunes already exceeds the supply. When cured, this fruit may be shipped to all parts of the world, and like the date it is among the most wholesome of fruits. We have seen those who care nothing for the imported prune, enjoying, with all the zest of an epicure, the delicious flavor of those grown in the soil of Southern California. It is to be hoped that our orchardists will give more attention to the cultivation of these fruits, and that they will yet be found in greater abundance among the supplies of the tropical and semi-tropical fruits of this section.—Los Angeles Times.

#### YOLO AND SOLANO CROPS.

C. L. Kinkade, a farmer who resides near Davisville, was in Sacramento, Monday, and says the crops from Dixon to Woodland and in fact in every portion of Yolo county, have not looked so well nor promised such abundant harvests, in the past as they do at present. A few weeks since a bag appeared in the grain fields, and the farmers were fearful that they would entirely destroy the crops. The last heavy rain, however, completely destroyed these insect pests, and the farmers are happy and anticipate abundant harvests and golden returns. The adobe soil in the neighborhood of Dixon, which could have been purchased a few years ago for five dollars per acre, has by a system of summer-fallowing been made very valuable, and this year will yield at least forty bushels per acre.—Record-Union.

Subscribe for THE RESOURCES OF CALIFORNIA.



OPPOSITE UNION SQUARE

THE LEADING

### Commercial School

ON THE COAST.

### LIFE SCHOLARSHIPS

—FOR—

Business Course. Only \$70.

NO VACATIONS.

Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Healthful Location.  
Ladies Admitted.

Special Inducements Offered to Per-  
sons of Neglected Education.

Business Course.  
Academic Course.  
Combined Course.  
Penmanship Course.  
Modern Languages.  
Photographic Course.  
Special Branches.

For Further Information call at the  
College Office

No. 320 POST ST.,

Or Address the Proprietors,

CHAMBERLAIN & ROBINSON.

PRESCOTT & CO.,

PROPRIETORS OF

Queen City Market,

DEALERS IN ALL KINDS OF

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED  
MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Choicest Eastern Hams, Bacon, Lard and  
Foreign Sausages of all Kinds.

CORNE BEEF AND PORK FOR SALE BY  
THE BARREL.

1154-1158 Market St., and 6-8 Taylor St.



## SILK CULTURE.

It will interest many, who have been studying silk culture, to read the following from the *Santa Barbara Press*:

Great efforts are being made by the Silk Culture Association, of this State, to arouse an active interest in silk culture. The society has now ready, for sale or free distribution, a large quantity of silk-worm eggs, and the secretary, Mrs. E. P. Keeney, will answer applications for the same, or by letter or circular supply practical information to parties preparing to start cocoaneries. Last year silk was raised in twenty California counties, and such was the success in quality that samples are to be sent to Philadelphia to compete for the national prize of \$500, offered this year for the best American cocoons. The coming year will, perhaps, be a sort of test of the aptitude of our climate. Silk farms are being planted in many of the middle and southern counties, and as an incentive to the labor, 25 cents per pound more than the market value is offered for all cocoons raised here. Should private enterprise zealously aid public endeavor, there is room for the prophecy that this valuable staple of commerce may be added to our list of exports. Santa Barbara should not wait for other counties to take the initiative in this new industry, and it would be a public benefit if those who have leisure and proper facilities would make a series of careful experiments. The climate here is almost identical in temperature and other material conditions with that of some of the finest silk-producing localities elsewhere, and we might excel them, as far as we have in the matter of fruit and wine. Where olives, the mulberry and vine flourish as here, the daughters of the land should be able to "walk in silk attire" spun from gossamer webs tended and reeled by their own delicate fingers. Those who are experienced in the details of silk culture describe it as an extremely fascinating employment, and one in which ladies or children can do better than men. In Southern California, as elsewhere, is urgently needed any work that might prove remunerative to boys and girls without overtaxing their strength. For this reason, if no other, the subject should be seriously considered and the silk-worm given a chance.

## HOME WINES.

One of the most notable features of California industry is the rapid extension of vineyards. Twenty years ago Sonoma valley boasted of but a few acres of vines, and a comparatively small figure as a wine-producing district until several years later, when her crop reached such dimensions as to demand a place in the markets. Within the last ten years, the growth of her grape industry has been something marvelous. The upper part of the valley is now almost one continuous sea of vines, stretching away on either side upon the foot-hills, and still the good work goes on; extension and improvements are still the order of the day. Many of our vintners are getting rich; selling off parts of their large ranches, thereby making room for new settlers, and paying more attention to the proper cultivation of their land. Land which was heretofore used only for pasture is now being cleared and set out in vines. Wheat-growing in this valley has been almost entirely superseded by grape-growing and wine-making. In order to secure a respectable standing in the markets, our wine-makers have had to contend against many serious obstacles, but they are fast being overcome. To present the native champagne to his guests is no longer considered beneath the dignity of a gentleman of means; and as for claret, port and sherry, we ask no odds of any foreign production.—*Sonoma Index*.

## THE WONDERS OF CALIFORNIA.

California is wonder land. It was only the other day that we made mention of the discovery of evidences of a buried forest in San Bernardino valley; and now we read that a primeval redwood forest has been discovered in San Luis Obispo county, near the headwaters of the Rio Siquo. Also a magnificent waterfall, where the waters of the Siquo pour over a precipice six or seven hundred feet in height. The wonders of the Golden State are not half known. Within her borders are many spots never trod by the foot of man. May it not be possible that some of them contain objects of interest even more striking than any that have yet been discovered within the short space of time—a half century or less—since the adventurous Americans first set foot on her soil?—*Los Angeles Mirror*.

## SOMETHING ABOUT SALMON FISHING.

The following facts and figures, from the *Vallejo Times*, convey some idea of the growing importance of this comparatively new industry:

There are employed in the salmon fisheries, between San Francisco and Sacramento, about 800 boats. Each boat is manned by two fishermen; there are, therefore, 1,600 men employed in catching salmon between the two points named, or in a distance of 120 miles. There are 250 boats in the Straits of Carquinez and Vallejo bay. There are nine canneries along the river and Suisun bay, and several in San Francisco, employing, on an average, from 60 to 80 men to each establishment. There are, therefore, no less than 2,500 men employed in taking salmon and canning them for home and foreign consumption.

The cost of a fishing outfit ranges from \$450 to \$800. A suitable boat can be purchased for an average price of \$260. The nets in use up the river are comparatively small, and cost about \$200; those used hereabouts will average at least \$300 apiece—they are of much greater depth, and contain a great deal more material.

The average daily catch varies according to the season. Last season, the salmon ascended in such numerous quantities that the fishermen could have caught each day, per boat, for a period of six weeks, over 100 fish. But the markets were glutted, and as it was impossible to dispose of that number, they contented themselves with catching merely enough to supply the demand. This season the average daily catch per boat does not exceed twenty fish, and the supply is not sufficient to keep the canneries running at their full capacities. The price, of course, varies according to the supply and demand. Last year the canneries paid from 40 to 65 cents apiece for fish. This year they agreed to pay 50 cents, but the Collinsville cannery raised to 70 cents, and now the Benicia cannery offers \$1.00. A number of boats fish below Mare Island, but the fishing there is difficult, owing to the roughness of the water. Vallejo bay is found to contain many fish, and within the last two years a place above Vallejo, on Napa river commencing at what is known as Slaughter House Point, has become quite a favorite fishing ground. The grounds up the Sacramento river are also extensive, and thousands of salmon are caught there during the season.

## A FAVORED LOCALITY.

A correspondent of the *Rural Press* has the following concerning a portion of Butte county: Having been through many parts of this State, seldom have I met with a more favored inland location than between Marysville and Oroville, especially in the foot-hills. There is a varied rich red and, in some places, gravelly soil. This characterizes the land around Moore's station. Here good rich bottom wheat land in Butte county, close to the railroad, and fifteen to twenty miles from Marysville, is to be had at \$20 per acre. Superior grape-vine land is available at \$7 to \$15 per acre, and there are even better chances on shares. A. W. Gould, one of the leading extensive land holders and rich men, is also willing to give land on the most liberal terms to parties seeking homes of from five to a thousand acres. The climate, for an inland location, can not be surpassed. It is good and healthy. There is good water from the numerous abundant springs rippling from the hills, and there are good wells in the valleys, and two flumes. Water ditches can be brought in. There is a lumber, saw and saw mill going up, and a distillery or winery finished already, and other industries are in contemplation, so that the little village, with its good farming country and manufactories now in progress, is certain to grow rapidly.

## GRAPE GROWING.

Grape growing is receiving more attention this year among San Joaquin farmers than ever before. The *Stockton Independent* says:

There has been unusual activity among farmers in the direction of setting out vines. It is claimed that some portions of the San Joaquin Valley cannot be excelled in cheapness and adaptability of soil for the grape, in the whole State of California. The climate is believed to be admirably suited for vineyards, as for years the frosts have not destroyed vines to any extent. Within a very short period over 700 acres have been planted to vines, and at least 3,000 acres more have been selected for the purpose of cultivating the grape before another year elapses.

## FIRE AND MARINE INSURANCE AGENCY OF HUTCHINSON & MANN, Nos. 322 and 324 California Street and 302 and 304 Sansome Street, San Francisco.

## Agents for The

Agricultural Insurance Co. .... New York,  
\$1,521,630.  
Confiance Ins. Co. .... Paris, France,  
\$6,835,298.  
Fire Ins. Ass'n (Limited) .... London, Eng.,  
\$1,573,291.  
Glard Insurance Company .. Philadelphia,  
\$1,208,615.  
New Orleans Ins. Ass'n. .... New Orleans,  
\$573,216.  
St. Paul F. & M. Ins. Co. .... St. Paul, Minn.,  
\$1,048,673.  
Standard Fire Office (Limited) London, Eng.,  
\$1,300,000.  
Tentonia Ins. Co. .... New Orleans,  
\$418,045.

## MARINE.

The London and Provincial Marine Insurance Company. .... London,  
\$6,278,362.  
La Fouchere Marine Ins. Co. .... Paris,  
\$2,250,000.  
Capital Represented. . . \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. L. CHALMERS,  
Special Agent and Adjuster.

## STOCKTON



F. R. CLARKE, Principal.

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the Year. Tuition is less than our half usual rates. Excellent board \$10 per month.

## COURSES OF STUDY:

Full Business Course, Review Course,  
Teacher's Course, Academic Course,  
Languages, Special Courses,  
Telegraphy  
The COLLEGE JOURNAL, containing full particulars sent postpaid. Address: F. R. CLARKE,  
P. O. Box 16, Stockton, Cal.

## F. A. HATCH &amp; CO.,

(Metallurgs S. F. Produce Exchange.)

## COMMISSION MERCHANTS, 122 CLAY ST., SAN FRANCISCO.

Flour, Grain, Wool, Beans, Dried  
Fruit, Honey, Etc.

## LIBERAL ADVANCES MADE ON CONSIGNMENTS.

—AGENTS FOR—

Healdsburg X X X Flour

—AND—

UNION MILL FLOUR.

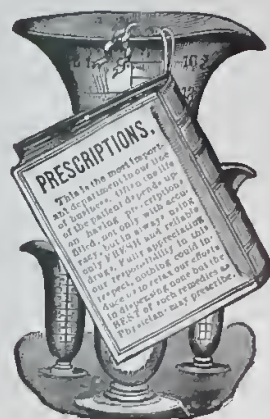
**\$72** A week made at home by the industrious. Best business now before the public. Capital not needed. We will start you. Men, women, boys and girls wanted everywhere to work for us. Now is the time. You can work in spare time, or give your whole time to the business. No other business will pay you nearly as well. No one can fail to make enormous pay, by engaging at once. Cash on 't and terms free. Money made fast, easily and honorably. Address: Thos. & Co., Augusta, Maine.

## JAMES G. STEELE &amp; CO.,

## Druggists and Manufacturing Chemists,

RESPECTFULLY CALL ATTENTION TO  
THEIR NEW ARRIVALS OF

Foreign Perfumery, Cologne, Scented  
Toilet Soaps, Hair, Tooth and Nail  
Brushes, Combs, Hair Oils, Pomades, Face  
Powders and Cosmetics, Sponges,  
Patent Medicines, Etc., Etc.



JAMES C. STEELE &amp; CO.'S

## Palace Drug Store, PALACE HOTEL.

635 Market Street, - - SAN FRANCISCO.

## W. T. GARRATT'S

## BRASS AND BELL FOUNDRY, SAN FRANCISCO.

MANUFACTURER AND IMPORTER OF

Church and Steamboat BELLS and GONGS

BRASS CASTINGS of all kinds,  
WATER GATES, GAS GATES,  
FIRE HYDRANTS,  
DOCK HYDRANTS,  
GARDEN HYDRANTS.

A GENERAL ASSORTMENT OF ENGINEERS' FINDINGS



Hooker's Patent

CELEBRATED

STEAM PUMP

\$7 The best and most  
durable in use. Also  
a variety of other

PUMPS

For MINING and  
FARMING purposes

Root's Blast Blowers.

For Ventilating Mines and for Smelling Works.

HYDRAULIC PIPES AND NOZZLES.

For Mining Purposes.

GARRATT'S IMPROVED JOURNAL METAL

—IMPORTED BY—

IRON PIPE AND MALLEABLE IRON FITTING

ALL KINDS OF

SHIP WORK &amp; COMPOSITION NAILS

AT LOWEST RATES.

## THOS. PRICE'S

## ASSAY OFFICE

AND CHEMICAL LABORATORY.

524 Sacramento Street, San Francisco.

DEPOSITS OF BULLION RECEIVED, MELTED  
into bars, and returns made in from twenty-four  
to forty-eight hours.

Bullion can be forwarded to this office from any part  
of the interior by express, and returns made in the  
same manner.

Careful Analyses made of ores, metals, soils, waters,  
Industrial products, etc. Mines examined and reported  
upon. Consultations on chemical and metallurgical  
questions.

**REST** not, life is sweetening by, go and dare be-  
fore you die, something mighty and sub-  
lime leave behind to comfort thee " \$66  
a week in your own town. \$5 outfit free. No risk  
nothing you everything. Many are making fortunes. La-  
dies make as much as men, and boys and girls make  
great pay. Reader, if you want business at which you  
can make great pay all the time, write for particulars to  
H. HALLATT & Co., Portland, Maine.



# LLEWELLYN FILTER-HEATER,

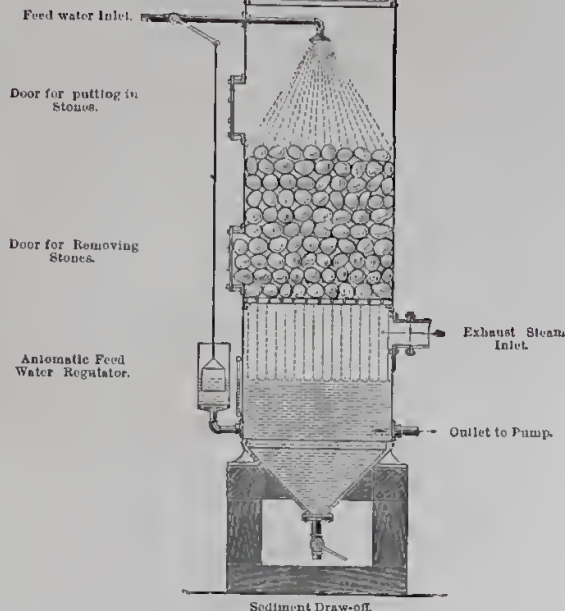
Patent Issued Aug. 12, 1870, Re-issued Aug. 10, 1881.

For the Prevention and Removal of

## STEAM BOILER INCRUSTATIONS

WITHOUT THE AID OF CHEMICALS.

Steam Outlet.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent. of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel. Further particulars with full descriptive circular and price list can be obtained at the office of the

LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY.

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufactory, Columbia Foundry, 133 and 135 Beale Street.

## The California Lloyds

### UNION INSURANCE COMPANY

OF CALIFORNIA.

THE CALIFORNIA LLOYDS

(Established in 1861).

FIRE AND MARINE

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 476 and 418 California St.

Agencies in all the Principal Cities of the United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary  
C. P. FARNFIELD, General Agent  
GEORGE T. BOHEN, Surveyor

J. F. FARNWORTH, M. T. BREWER.

M. T. BREWER & CO.,

Nos. 30 and 32 J Street,

SACRAMENTO, - - CALIFORNIA

COMMISSION MERCHANTS & WHOLESALE DEALERS IN Foreign and Domestic Groceries and Delicat. Fruits, Produce, Honey, Nuts, Garden and Flower Seeds. Please give us a trial. 30 and 32 J Street, Sacramento, Cal.

**WISE** people are always on the lookout for chances to increase their earnings, and in this become wealthy; those who do not improve their opportunities remain in poverty. We offer a chance to make money. We want men, women, boys and girls to work for us right in their own localities. Any one can do the work properly from the first start. The business will pay more than ten times ordinary wages. Expensive outfits furnished free. No one who engages fails to make money rapidly. You can devote your whole time to the work, or only spare moments. Full information and all that is needed sent free. Address, Hiram & Co., Portland, Maine.

F. P. BACON, Pres. C. L. FOUTS, Sec.

## THE Globe Iron Works Co.

FOUNDRY,  
MACHINE SHOP,  
and FORGE.

Manufacturers and Repairers of all Kinds of

MACHINERY AND IRON CASTINGS,

Hoisting and  
Mining Machinery.

LOCOMOTIVES.

Portable, Stationary and  
Marine Engines.

BISHOP'S ECONOMICAL MINING  
PUMP APPARATUS,

Which does away with Cumbrous Pump Rods, V Bobs and Hydraulic Bobs, operating equally well in shafts or inclines, admitting of deflection into distant workings. Circumstances furnished free, upon application.

AND  
MINING HORSE-POWER AND  
QUICKSILVER FEEDERS.

SPECIALTIES.  
PATENT AIR COMPRESSORS.

222 and 224 Fremont St.,

Between Howard and Folsom  
San Francisco

### A RAPIDLY-GROWING SECTION.

The Pomona Times, Los Angeles county, thus speaks of the rapid growth of its principal town and surrounding neighborhood:

Pomona has not grown to be a city yet, but as it has built up so rapidly and has already taken its stand among the important towns of Southern California, we are led to reflect on the cause of this sudden growth and the rapid advancement of its surroundings. There is probably no portion of the Pacific Coast where nature has wrought so finished a piece of workmanship, or so nicely blended grandeur and beauty as in this particular locality. On the North mountains are piled up, 10,000 feet high, pyramids of rock and soil, with which is mixed enough of gold to tempt the hardy miner to prospect their intricate canyons. On the south are undulating hills—grazing range for tens of thousands of sheep and cattle—and lying between, the great Pomona valley, with soil that invites the agriculturist, and climate that gladdens the heart of the invalid, and heavily surpassed on earth. No wonder then, that Pomona has grown from a sheep herder's camp to its present size in so short a time; or that the valley has been transformed from a wild, unoccupied solitude to a peopled land of orange groves, vineyards and fields of waving grain. Nowhere in the State is there a smaller valley, and nowhere else can be found a greater variety of productions. Everything can be grown here. In a drive of five miles can be seen orange, lemon, banana, fig, olive, prune, peach, apple, pear, cherry, quince, plum and every variety of grapes, also fields of barley, wheat, corn, etc. All of which go to show why this town and valley are so rapidly building up.

### MINING IN EL DORADO.

It now looks very much as if the miners around Grizzly have struck the fountain and source of all the gold that filled the river beds and gulches, and brought eager thousands to our State in early days. Every week brings new developments, and the permanency of the mines is assured. It is true that some of these mines were worked in early days, and afterwards had to be shut down, but the reasons for this are easily discovered. In the first place, extracting the gold from quartz was not as well understood as now. Amalgamating was very loosely managed, and sulphurets that are now worth \$300 a ton were then thrown away. Only the ore near the surface could be mined then. Giant powder was unknown, and the hard rock below water level was too wet to blast with black powder. Good pumps were not obtainable, and mining machinery was rude and insufficient. Ore worth less than \$50 a ton would not pay to mill. Now \$5 ore can be milled at a profit. The improved processes of amalgamating make it possible to save even the finest of gold. The sulphurets are also saved and reduced. Steam pumps keep the mines dry, and make it possible to work them to any depth with only the additional cost of hoisting the ore which, with the improved machinery, is very slight.—*Placer Democrat*.

### GOOD GRAPE LAND.

Prof. E. W. Hilgard, in a recent report on the climatic and agricultural lands of the Pacific Coast, pays the following tribute to a large section of California:

In the country lying northward of the bay, the soils formed by the eruptive and volcanic rocks assume increasing importance, and constitute the leading features of the grape-growing region of Sonoma, Napa, Solano and Yolo counties, as well as farther north, in Lake and adjoining portions of Colusa and Mendocino. Here the lower portions of the mountain sides are frequently constituted of the heavy tertiary and cretaceous material which forms adobe, while the upper portion consists of igneous rocks yielding lighter soils, often deeply colored with iron, and more especially adapted to fruit culture. The valley soils are, of course, a mixture of both, and it is on such composite soils that enormous yields of from twelve to fourteen tons of grapes per acre are sometimes obtained.

### A LARGE YIELD.

Some of Stockton's grain speculators have been estimating the grain yield of the San Joaquin valley for the season of 1883. Careful calculations estimate the yield 25 per cent. larger than 1882.

### ORANGES IN BUTTE.

An Oroville correspondent of the Sacramento Bee speaks of orange growing, in the foothills of Butte county, as follows:

The valley land, or that so well adapted to grain and hay, is not so valuable for the orange as the warmer yet higher foothill land. It is within quite a recent period that the culture of the orange has attracted attention here. There are trees twelve or fifteen years of age in this vicinity—Oroville—but it is only within the past two years that more than enough oranges for home use have been grown. Two years ago 1,000 oranges were offered for sale. Last year not less than six times that many were sold. The orange here ripens quite early. Some were ripe in November and many in December. Hundreds were sold here for Christmas trees. Most of the oranges are seedlings that so far have been planted. The Naval, St. Michael and other celebrated varieties have been tried and found to do well. The red hill land seems well adapted to the orange trees. The land can be bought for from \$6 to \$10 an acre. Large tracts of this land can be irrigated at a moderate expense. The area for the cultivation of the orange in Butte is not limited, as it extends along the hills a distance of not less than eighteen or twenty miles, and in width not less than twelve miles. The fruit grown is very fine, being free from mildew or rust, and presenting a bright and attractive appearance. Settlers desirous of growing the orange will find they can grow good fruit that will ripen early.

### A FAVORED CLIME.

When we read of the terrible cyclones which sweep across the country east of the Rocky Mountains, leaving fell destruction and death in their wake; such, for instance, as that which visited the Mississippi Valley lately, totally destroying the town of Beauregard, leaving a portion of the town of Wassen in ruins, and damaging more or less numerous other towns in its desolate course, killing some forty or fifty persons outright, and wounding over 150 others, more or less; we are forcibly reminded of the great blessings enjoyed by the people of California in being exempt from these terrible thunder storms, cyclones and tornadoes, which afflict the people of the East; and for which exemption the people of this State have cause for thankfulness to that Providence which gives us genial skies, and protects us from the warring elements which lay waste the country on the Atlantic seaboard. We are justified in bragging of our beautiful and genial clime of the placid Pacific. We are anxious that our brethren at the East shall know and realize the fact that ours is a highly favored State, and we open our doors and hearts to all who may seek a home in this land of safety, peace and prosperity.—*Oakland Tribune*.

### COPPER IN CALAVERAS COUNTY.

Copper mining is one of the resources of Calaveras, and the San Joaquin and Sierra Nevada Narrow-Gauge Railroad will, unquestionably have the effect of stimulating effort in that field. Already signs of new life are visible in the copper mines of Campo Seco, the northern extremity of the Calaveras copper belt. An extensive copper formation along the western verge of the foothills was thoroughly explored more than twenty years ago, and nearly \$5,000,000 worth of ore has been taken out from the mines at Copperopolis alone. The ore extracted was of sufficient value to warrant transportation a distance of 35 miles by teams, to tide-water, and its shipment to Wales, for reduction. There is still any quantity of ore, of grades inferior to that shipped years ago remaining, and which only awaits cheaper means of transportation to enable parties to handle it with profit, and, sooner or later, every pound of it will be removed.—*Calaveras Chronicle*.

### PROFITS OF FARMING IN BUTTE.

Our attention was called to the profits made by some of our farmers. Said one farmer: "Six years ago I was not worth a dollar. I began by renting land, and am now worth \$10,000. Part of this is due to my two sons, both old enough to do almost men's work in the field." Another, five years ago, when he moved into Butte county was \$6,000 in debt. He has paid off his debts, bought a ranch, and paid \$5,000 on it, and has his stock, feed and farming implements, besides a growing crop. He has made, in the five years, not less than \$16,000 above all expenses.—*Butte Record*.



THE DIVIDEND RESULTS OF THE MINING INDUSTRY FOR 1882.

The industrial and economic importance to the country of its mines of the precious metals is by no means to be measured by the mere sum total of dividends or profits to their owners, which may result, year by year, from their exploitation. The production of \$1,150,000,000 in gold by California, between 1848 and the close of 1882, is in no way to be gauged in its economic consequences by the actual share of it that has accrued in the way of profit to those who, either by their labor or capital, extracted it from the earth. Nor should the product of the Comstock lode, variously estimated at from \$300,000,000 to \$415,000,000, be considered solely from the point of view of the dividends which have reached the pockets of shareholders of various corporations. The consequences of our product of the precious metals since 1848 reach immeasurably above and beyond any sum total of actual profit derived from its extraction by those immediately engaged in any connection with that industry, and to an extent not approached even approximately by the product of any other branch of human industry. Imagine the commercial and industrial condition of the United States, and indeed of the world at large, without having had the steady stimulus, during the last 30 years, of the immense amount of gold derived from the placers of the Pacific Coast, and the discovery of which led indisputably to the search for and discovery of gold in Australia. That discovery, happening as it did, at a time of world-wide industrial and commercial adversity, immediately served to restore vitality into every workshop of Europe and America. At the same time it opened new horizons for the starving people of Europe, and new regions for human intelligence and energies to develop, with a profitable scope not reach hitherto unknown. The three or four railways that stretch across our national territory, from the Atlantic to the Pacific, with lines of mighty ocean steamers that speed to and fro across the Atlantic, giving almost daily communication between Europe and the United States, are direct consequences of the production of so large an amount of gold in California, as much so as the existence of such a city as San Francisco upon the Pacific Ocean. Even the fact that California has now about 100,000 acres in vineyards, of the average value of at least \$200 per acre, and that the State possesses one-tenth of all the sheep in the United States, may be rightly ascribed to the previous production of so much gold in that quarter. And to this cause also is to be attributed the commercial result of shipments from San Francisco, of wheat and flour, between the 1st of July, 1882, and March 7, 1883, to the value of \$21,800,000. But independently of these agricultural and other incidents, as we may maintain, to the production of gold and silver by the States and Territories of the Pacific slope, the actual dividend results which have been reported in the pages of the Mining Record during the last five years, make a most satisfactory showing by the industry of mining for the precious metals, as may be seen.

Last year, for example, the dividends paid by incorporated gold and silver mining companies alone were as follows:

Mines.	Amount.
Arizona.....	\$1,887,500
Colorado.....	2,326,650
California.....	1,312,047
Dakota.....	1,110,090
Montana.....	321,516
Nevada.....	668,292
Utah.....	2,129,000
Idaho.....	38,000
Georgia.....	49,000
New Mexico.....	204,000
Total.....	\$11,039,975
Mexico.....	1,000,000
	\$12,039,975

In this we have included certain Mexican mines owned and worked exclusively by American capital, under American organizations, excluding which, however, we have \$11,039,975 as the dividend result upon a product for the year, as reported by Mr. J. J. Valentine, as follows:

Gold.....	\$20,011,318
Silver.....	48,134,139
Lead.....	8,008,125
	\$76,153,592

Thus the dividends paid simply by incorporated companies during 1882 have amounted to 11 1/2 per cent. upon the whole product of the industry, while no inconsiderable part of the product has been derived from mines not owned by incorporations, but individuals or private companies that have made no report of their dividends or profits.

For the five years ending December 31, 1882, the dividends paid by these incorporated companies and the product of the mines of the country, have been about as understated:

Amount of product.	Amount of dividends.
1878.....	\$78,276,000
1879.....	\$71,180,000
1880.....	72,680,000
1881.....	9,500,000
1882.....	76,434,000
	31,676,100
	80,000,000
	86,162,000
	10,250,000
	\$21,435,000
	\$129,551,000

In the face of such facts and figures as the foregoing, we trust to hear less hereafter of the precariousness and alleged unprofitableness of the business of mining for the precious metals.—*Cal., New York Mining Record*

GOOD ADVICE.

The Sun urges the farmers of Colusa county to stack their straw, and adds: We would like to see some one try the English method of stacking. The straw stack and green grass, just cut, in layers. Say six inches of green grass to three feet of straw. This grass cures in the stack, and sends its aroma all through the straw so as to give it all the flavor of hay, and it also adds greatly to the strength of the straw. Stacked in this way with freshly cut alfalfa, a straw stack would be almost as valuable as hay. The English save all their straw in this way, and in that wet climate the straw cannot be nearly so good as ours.

THE ORANGE TRADE.

From the following, taken from the Los Angeles Herald, it would seem impossible to overdo the business of growing oranges.

The steady expansion of our orange groves has frequently caused the question to be mooted in this section as to whether the business is not overdone. Eleven years ago, when Northoff wrote the remarkable series of letters to the New York Tribune, which were afterwards embodied by him in a book devoted to California, the orange-producing section of this State was comparatively restricted in area. Los Angeles county was the main producer, and the production even here was limited to the Pueblo, the San Gabriel valley and to Anaheim. In San Bernardino county a few groves, out at old San Bernardino, were the only producing regions, while the few oranges grown in San Diego county were raised on Col. Cave J. Conte's Guajome ranch. Since then a great change has come over the orange situation. In Los Angeles county, in addition to a great extension of the old and famous groves of the valley proper, and of the San Gabriel valley, in Pasadena, hundreds of thousands of trees have come into bearing, with Westminster and Orange, Santa Ana, the Duarte and Azusa, and a score of other orange producing sections, have established themselves as formidable rivals of the older groves, in many instances producing finer fruit than they. We probably risk nothing by assuming that the orange production in Los Angeles county has certainly doubled, and perhaps tripled since Northoff gave such an enticing account of the profits of orange culture.

The advances in the citrus fruit culture in San Bernardino county have been even greater, relatively. When Northoff was in this State, Judge North and a few co-laborers had but just engaged in their experiment of reclaiming the black sands where Riverside now stands and converting it into a semi-tropical Paradise. Today Riverside is a large producer of a very superior class of oranges. Even San Diego has entered the field in earnest, and in the Chollas, Paradise and Sweetwater valleys, and on the Kinball ranch, at National City, is demonstrating the ability to make herself felt in orange production. [Add Jamul, Cajon, Spring valley, Santa Maria, Fall Brook, Pala, and several other sections.] This fact was proved the other day by the dispatching of a full car-load of San Diego grown oranges to the East. This is a modest but noteworthy instance of how the area of production has widened during the past decade.

Are we, then, prepared to admit that there is danger of an over-production of this prized fruit? Most emphatically not, and for the following reasons:

While the production has increased to the extent we have outlined, the fact must still be borne in mind that the bulk of country, even in Southern California, capable of producing the orange, is very limited, the quality of the fruit is largely dependent upon the immediate local climate and other environment of the groves. We can take the together to extensive tracts in the heart of Los Angeles, where the orange trees ought to be grubbed out, the soil, compact and repellant and being utterly unfit for this fastidious plant. With only a limited section of the United States adapted to the growth of the orange, and only a fractional part of that limited portion available for the growth of fine fruit, we have no hesitation in saying that there is infinitely more danger of glutting the potato than the orange market.

But, while we fearlessly take our stand on the position that the orange market cannot be glutted, on the other hand a bushel of inferior oranges is more than it will take with any profit to the grower. It is worse than folly to encumber the ground with trees which produce a sort of orange rubbish. All such groves ought to be at once grubbed with superior grades of the orange; and if, after this has been done, the soil is found to be intractable, the trees ought to be cut down and the ground planted in alfalfa, grapes or some other crop which will yield an income.

Owing to the fact that the Los Angeles oranges are at its best when the Coast, Florida and Louisiana oranges have been cleaned out of the market, the East will take every good orange that can be raised in this country or section. Since the establishment of the liberal fruit schedules of the Southern Pacific Railway there has been no instance of the failure of the Eastern market to absorb a shipment of our oranges. San Francisco, which used to be the sole recourse of our orchardists, now only receives the refuse portion of the crop. The only instance of the price being unfavorably affected by the amount of the shipment East was when three car loads from Los Angeles arrived in Chicago on the same day, and even then the price was only momentarily lowered, the consignment having proved quite remunerative. Our ability to supply the market at a time when our orchardists will encounter no competition from any point is a priceless advantage.

The magnitude of the demand for this fruit may be best understood by a statement of the fact that the shipment of oranges from Modesto, and three other Italian ports, averaged, for a decade, fully \$25,000,000 a year in value. The fruit is a staple article, and, with the precaution of sending forward to the now and highly-desirable markets in the East, which have been created by our railway extension, nothing but first-class oranges, the demand will increase in a far greater ratio than it is possible to attain in their production.

THE DERBEE.

Parties who recently visited the Derbee drift mine say that the new bedrock tunnel has been connected with the mine from the lower shaft. This tunnel is about 2,700 feet long, and there are numerous drifts from it. About 100 men are employed, and the force will be largely increased soon. Our informants say the banks of gravel are rich in gold, and they are so extensive they can not be worked in twenty years. They saw about a peck of gold that had been cleaned up lately.—*Newish Transcript*.



Southern Pacific Railroad Summer Arrangement.

Commencing Wednesday, April 18, 1883.

And until further notice, Passenger Trains will leave San Francisco, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
8:30 A. M.	San Mateo, Redwood, and Menlo Park.	6:40 A. M.
9:30 A. M.		8:10 A. M.
10:40 A. M.		9:53 A. M.
3:30 P. M.		10:02 A. M.
4:25 P. M.		3:36 P. M.
5:15 P. M.		1:43 P. M.
6:50 P. M.		6:00 P. M.
11:45 P. M.		7:50 P. M.
		8:15 P. M.
8:30 A. M.	Santa Clara, San Jose and Principal Way Stations.	9:03 A. M.
10:40 A. M.		10:42 A. M.
3:30 P. M.		3:36 P. M.
4:25 P. M.		6:00 P. M.
10:40 A. M.	Gilroy, Pajaro, Castroville, Salinas and Monterey.	10:02 A. M.
3:30 P. M.		0:40 P. M.
10:40 A. M.	Hollister and Tres Pinos.	10:02 P. M.
3:30 P. M.		0:00 P. M.
10:40 A. M.	Watsonville, Camp Goodall, Aptos, New Brighton, Soquel (Camp Capitola) and Santa Cruz.	10:02 A. M.
3:30 P. M.		0:00 P. M.
10:40 A. M.	Solitude and Way Stations.	0:00 P. M.
7:30 A. M.	Monterey and Santa Cruz. (Sunday Excursion.)	8:43 P. M.

\*Sundays excepted. (Sundays only. (Theater train, Saturdays only.)

Stage connections are made with the 10:40 A. M. Train, except Pascadero Stages via San Mateo, and Pacific Coast Stage via Santa Clara, which connect with 8:30 A. M. Train.

SPECIAL ROUND-TRIP TICKETS.—At Reduced Rates.—to Pescadero, Monterey, Aptos, Soquel and Santa Cruz; also, to Gilroy, Pajaro and Paso Robles Springs. EXCURSION TICKETS.—Sold Saturdays and on Sunday mornings—good to return on Monday—to Santa Clara via San Jose \$2.50; to Gilroy \$4.00; to Monterey and Santa Cruz, \$5.00, and to principal points between San Francisco and San Jose; also to Gilroy Hot Springs, \$6.00.

SUNDAY EXCURSION TICKETS.—To either Monterey or Santa Cruz, and return, \$3.00.

Ticket Office.—Passenger Depot, Townsend street, and No. 2 New Montgomery street, Palace Hotel.

A. C. BASSETT, Superintendent. H. R. JUDAH, Asst. Pass. & Tkt. Agt.

SOUTHERN DIVISION.

For points on Southern Divisions and the East, see C. P. K. R. TIME SCHEDULE.

OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY

FOR JAPAN and CHINA

LEAVE WHARF CORNER OF First and Braum Streets, at 2 P. M., YOKOHAMA & HONGKONG

Connecting at Yokohama with Steamers for Shanghai.

Will sail from San Francisco:

COPTIC..... Saturday, May 5th.

ARABIC..... Thursday, June 28th.

OCEANIC..... Tuesday, July 10th.

COPTIC..... Saturday, July 21st.

ARABIC..... Saturday, September 15th.

OCEANIC..... Thursday, September 27th.

COPTIC..... Thursday, October 11th.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cabin plans on exhibition and passage tickets for sale at C. P. K. R. Co.'s General Offices, Room 21, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 304 Market street, Union Block.

T. H. GOODMAN, Gen'l Passenger Agent

LELAND STANFORD, President.

THE NEVADA BANK

OF SAN FRANCISCO.

Paid Up Capital.....\$3,000,000

Reserve (U. S. Bonds).....3,500,000

Agency at New York.....62 Wall Street

Agency at Virginia, Nevada.

ISSUES COMMERCIAL AND TRAVELERS' Credit. Buys and sells Exchange and Telegraphic Transfers.

This Bank has Special Facilities for Depositing in Gold.

SAN FRANCISCO, CAL.



QUICK TIME AND CHEAP FARES

FROM

AUSTRALASIA, CHINA & JAPAN,

TO

NEW YORK

AND

LIVERPOOL.

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

CENTRAL PACIFIC

RAILROAD

CONNECTING WITH

Union Pacific Railway

AT OGDEN, UTAH,

AND

SOUTHERN PACIFIC

RAILROAD

CONNECTING WITH

Atchison, Topeka and Santa Fe Railroad,

AT DENING, NEW MEXICO,

AND THE

Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway Lines in the Eastern States, for all the Cities of the

UNITED STATES AND CANADA.

CONNECTING AT

NEW YORK

With the several Steamer Lines to

England, France

AND ALL EUROPEAN PORTS.

Silver Palace Sleeping Coaches,

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience to the Passenger while en route—combining the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable couches, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Patrons.

Children under Twelve years of age, Half Fare. Under Five years of age, Free.

100 pounds of Baggage per full Passenger free. 50 pounds of Baggage per half Passenger, free.

PRINCIPAL TICKET OFFICE

AT THE

OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

Where passengers, calling in person, can choose of routes and sleeping-car accommodations.

A. N. TOWNE, Gen. Superintendent. T. H. GOODMAN, Gen. Pass. & Ticket Agt.

SAN FRANCISCO, CAL.



F. S. CHADBOURNE &amp; CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.

FURNITURE

UPHOLSTERY

WAREHOUSES.

F. S. Chadbourne &amp; Co.

735

F. S. CHADBOURNE  
& CO.

FURNITURE

IMPORTERS, MANUFACTURERS,

—AND—

Wholesale and Retail Dealers in

FURNITURE AND BEDDING

OF EVERY DESCRIPTION.

Chamber, Parlor, Library and Dining  
Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish

Easy and Lounging Chairs, Etc.—Hotels and Private

Residences Furnished.—Designs Furnished

and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

## HUMBOLDT COUNTY'S OUTLOOK.

In speaking of the bright future of this prosperous county, the *Democratic Standard* says:

Humboldt County is at the very threshold of a period of unparalleled activity and progress. The spell is broken that has so long held her in abeyance. The inexhaustible wealth which lies in her natural resources has at last aroused the attention of both capital and labor, and it requires but the combined application of these two forces to make Humboldt, in a short time, not only the richest county in California, but in any of the United States. Natural causes and events have conspired to bring about a condition of things which is destined to promote at an early day commercial transactions reaching a magnitude of which but few have any conception. With our Port of Entry, we have unobstructed access to the commerce of the world. Steps are being taken to inaugurate extensive shipments of lumber to China, Japan, Australia, the Islands, Mexico, and the South American coast. Circumstances are transpiring which make it more than likely that our redwood will soon find an avenue through which to reach the eastern markets. When this is accomplished the demand will be regular and unceasing; it will be like pouring water into a sieve. A new interest is springing up as to the availability of our foot-hills for fruit culture. We have now five logging railroads in active operation, with two more projected for the present year. A broadgauge railroad for general traffic, to connect the great Eel River Valley with the bay and ocean commerce is now under a rapid course of construction. New and extensive lumbering mills are going up, and others are in contemplation. And even at this date the project of connecting Humboldt bay with the railroad system of the State is being earnestly considered by parties interested, the initial point and route offering the most difficult question in the problem.

This is no painted picture, but is real and tangible as presented. The forces of labor, capital and thought are now at work to push all these enterprises and projects to a reality. Humboldt bay is the safest and most completely land locked harbor on the coast. Trinidad can float and land the largest vessel in the world. What more elements and advantages could we ask that would conduce to our prosperity and rapid progress as a producing, manufacturing, and commercial community?

## FRUIT CANNERY.

There is no more desirable point in the State for the establishment of a fruit cannery than Napa City, or in fact most any point in Napa Valley. As an investment it could not fail to bring handsome returns. Every condition is favorable for such an investment, and why is it that capital ever on the alert for remunerative investments has not seen these favorable conditions? We have in the county abundance of choice fruits, and in three years there will be an increase of a hundred per cent. above that now produced. A large acreage of peaches, pears and apricots were planted last year and this year even more than last. As matters now stand the canneries of the State, outside of the county, are buying up our fruit and realizing a handsome profit. Representatives of these canneries last year engaged fruit six months ahead of the season.

We have the fruit, the easy access to market, the local capital, the labor, and why not the wisdom to establish such an enterprise? Let some of our dormant local capitalists take heed of this matter, and thereby afford us an accessible market for our fruits, and aid in building up homes among us, for an enterprise of this kind besides netting the capitalists or operator a large revenue, would give employment to a large number of men, women and children, who would make homes among us and add so much to our already rapidly growing prosperity and increasing population. Who will be the progressive man to forward this enterprise?—*Napa Viniculturist*.

## COST OF HOP CULTURE.

Several inquiries have been received at this office about the expense of planting a hop field. In order to supply this information we have consulted several hop-raisers. Through information thus gathered we are able to present an itemized exhibit of the cost of planting, cultivating and curing an acre of hops. Ground rent and the cost of clearing are not included in the estimate:

Plowing and harrowing.....	\$ 5 00
Roots, 1,640 at one cent each.....	16 40
Poles, \$20 at 2½ cents each.....	20 20
Setting poles.....	1 00
Twine and twining.....	8 00
Cultivation.....	15 00
Training, a continuous task.....	5 00
Successing and stripping; twice.....	5 00
Total.....	\$75 60

Added to the above is the cost of picking, curing, baling, etc. Estimating the first crop of an acre of new hops at 600 pounds of cured, packing would cost \$24, curing and baling \$15, and there would still remain an outlay for shipping, commissions, insurance, etc. The outlay for an acre is \$114, and the return is 600 pounds of merchantable hops. —*Ukiah Press*.

## FARMING IN CALIFORNIA.

We take the following extracts from a letter written to the *New York Observer*, by the Rev. E. Graham of New York City, who visited this State some time ago:

There is a class that can live like princes here, and yet may be called farmers. This is the class of cultivated, intelligent, wealthy people, who, coming from the East, buy choice little fragments of land, dainty pieces up the canyons, or on some beautiful slope sheltered from the wind and lying always open to the sun, where they can plant out a varied orchard and afford to wait five years for the fruit, where they can build a \$10,000 house, and have a nice carpeted stable and a spanking span of horses, with carriage and huggy to match, and lots of well-broken mustangs for the young folks to ride horseback; who can ride into the city every afternoon, and watch the novelties in the nurseries and fruit market, and send by express for bulbs and cuttings, seeds and shrubs, and trees, to Mexico and Japan and China; and who can afford to plant them, when they arrive at the cost of \$10 and \$20 per tree. \*

We would now say that there is a possibility of acquiring and retaining very pleasant homes within twenty or thirty, certainly 100 miles of Santa Barbara for a comparatively low price per acre, say \$15 or even \$10, and by putting up a three or four-room shell-board house, and working out at other jobs in the intervals of cropping, lay by as much money as will fence and plant the farm, so that in a few years one can have a homestead that he would not exchange for the best farm in New York or Ohio. The great compensation of living in California, and especially Southern California, is the temperate and healthful climate, and the great range of crops and variety of fruits possible in nearly all its valleys and on its hillsides. I would say, in conclusion, that fancy farming in small fruits and the various semi-tropical nuts and delicacies, would soon pay a handsome dividend. To such productions Southern California is certainly to be dedicated.

## A BEAUTIFUL PANORAMA.

The following description of a beautiful spectacle of nature, we take from the *Slanslans county News*:

A drive among the foot-hills of our country would, at this season of the year, amply repay the lover of nature. The lower ranges of gentle smooth rolling treeless hills are covered with a complete mass of green vegetation, intercepted throughout with borders and beds of the loveliest of wild flowers of every hue, color and shade of the rainbow. At this season of the year nature essays to deck our land in her loveliest attire, and nowhere under the sun is this more manifest than along the undulating bills of this county. Why it is that people of leisure will idle away hours of a brief life in the midst of grim, smoky, dusty towns, on the streets, sidewalks, in crowded saloons, halls, or theatres, when such a lovely panorama of nature can be seen at so little cost and trouble, is a mystery beyond comprehension. One hour at present spent in our foot-hill country, listening to singing larks, beholding the fancifully variegated colors of beautifully gorgeous flowers and verdure that cover the rolling wave like mounds, inhaling the delicious odors of nature's garden, drinking in under the calm sky the pure health giving atmosphere, should give a greater sense of joy to the mind than months in the crowded towns. Yet, men, and even gentle women, never seem to think of enjoying the great and beautiful spectacle presented by nature free of cost. To the discouraged, despondent, indigo colored, thin lipped, liver discolored, constipated inhabitant of towns, we recommend a week among the foot-hills of San Joaquin valley.

## A VALUABLE COAL MINE.

At a meeting of citizens in San Diego a few days ago, Dr. Chisolin made a report of a coal mine, located some twenty miles from Riverside. The *Sun* says: The Doctor then produced specimens of the coal, coke and sandrock formation which lies over the coal vein. He had visited the mine, which is situated about two and a half miles north of Laguna, five miles from the track of the California Southern railroad in a favorable position for a side track, and traced the croppings for two miles, accompanied by a mining expert. The drift was run in about forty feet, showing a good seam of a carboniferous character of formation. The specimens shown were to be considered merely as outcroppings, which had withstood the action of the elements for ages. As the drift proceeded the quantity of coal improved and became much harder. It brought about forty pounds to a sack, which he had taken from the face of the drift with a pick. Was perfectly satisfied that the vein was a legitimate one and is four feet three and one-half inches thick. There are three men now at work in the mine, but they make very slow progress. A blacksmith in Los Angeles tested the coal, made a perfect weld and pronounced it excellent. No bone or any other formation was found. The specimens were examined by Mr. G. W. Hiffenburg, who is a coal mining expert of considerable experience and pronounced it to be as good as he ever saw. The coal will be tested on Monday by some one whom the committee will nominate.





A BEAR CHANCE—CALIFORNIA GRIZZLY.



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, AUGUST, 1883.

ESTABLISHED, 1870.  
Office—320 Sansome St., Ballock Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM.**  
Six Months, \$1.25—Postage Paid.  
SINGLE COPIES, 20 CENTS.  
ISSUED MONTHLY.

## SIR BENJAMIN DEAN.

Of Boston, Mass., Most Eminent Grand Master, was born in Lancashire, England, August 14, 1824; was raised a Master Mason April 21, 1854, and created Knight in 1855, in De Molay Commandery, Boston. He was subsequently Grand Commander of the Grand Commandery of Massachusetts and Rhode Island. He was Grand Captain-General of the Grand Encampment from 1871 to 1874, and Grand Generalissimo from 1877 to 1880, when he was elected Grand Master. While he cannot be termed a politician, he has served a term in the State Senate and one in the National Congress. In his personal relations with men he is reliable, genial and popular. His high views of the duties of man and citizen, his devotion to his duty (as he sees it), his courtesy towards and consideration for the feelings of others, show in their true light the knightly qualities of a knight indeed. He is a man of family, having a wife and five children. He is one of a large family, having five sisters and four brothers, one of whom, Hon. Sir Peter Dean, of California Commandery, No. 1, came to California in 1849, and is well known on the Pacific coast, having served as President of the Society of California Pioneers and as State Senator.

## THIRTIENAL COMMITTEE.

Headquarters, 26 Montgomery street.

GEO. C. PERKINS, Chairman.

WM. O. GOULD, H. T. GRAVES,  
Vice-Chairman. Secretary

W. W. MONTAGUE, Treasurer.

Abell, Alex. G.  
Almeworth, J. C.  
Allen, Isaac P.  
Akerly, Benj.  
Anderson, James H.  
Anderson, T. H. B.  
Atkinson, E. C.  
Atlee, Wm. A.  
Badger, Wm. G.  
Barclay, P. T.  
Bart, T. R.  
Barker, Alfred  
Barnes, W. H. L.  
Barra, F. F.  
Bartlett, A. G.  
Bass, T. J.  
Bassett, Charles F.  
Bastion, J. G.  
Beach, C. W.  
Bechtel, F. R.  
Belcher, Wm. C.  
Benson, J. A.  
Benton, C. L.  
Bease, J. N.  
Bettis, F. A.  
Bicknell, J. D.  
Bishop, S. A.  
Blake, C. F., Sr.  
Blake, H. H.  
Blanchard, George G.  
Blanchard, N. W.  
Blaney, E. W.  
Bliss, R. H.  
Boone, R. W.  
Booth, A. G.  
Bray, George  
Bryngly, C. W.  
Brizze, W. E.  
Brimley, George T.  
Brown, C. F.  
Brown, F. E.  
Brown, Josiah P.  
Brown, R. R.  
Buckingham, A. E.  
Buckland, L. H.  
Bullington, J. M.  
Bump, G. H.  
Bunker, H. C.  
Burch, J. C.  
Borges, T.  
Borham, J. W.  
Buros, Henry J.  
Cahoon, W. B.  
Campbell, W. O.  
Carver, D. B.  
Casswell, T. H.  
Carton, F. M.  
Cayatte, T. J.  
Center, Wm.  
Chalmers, Alex.  
Chambers, A. H.  
Chalborn, G. B.  
Clapp, W. T.  
Clements John  
Clusky, Henry  
Cobb, H. A.  
Cochran, Wm. B.  
Cockrill, T. G.  
Coble, P. D.  
Cole, R. B.  
Coleman, C. C.  
Coleman, J. C.  
Coleman, Wm. T.  
Cone, J. S.  
Cook, Carroll  
Cook, Joseph W.  
Cooledge, I. B.  
Chamberlain, E. F.  
Chesley, C. C. H.  
Crane, B. G.  
Crane, L. T.  
Crow, A. H.  
Crocker, H.  
Curtis, John M.  
Curtis, N. G.  
Cutting, L. M.  
Dalton, F.  
Davies, Wm. A.  
Davis, C. H.  
Davis, Henry L.  
Davis, Isaac E.  
Davis, J. Z.  
Davis, M. S.  
Day, F. H.  
Dean, P.  
Dean, W. E.  
Denker, A. H.  
Dennis, S. W.  
Denison, S. C.  
De Witt, T. B.  
Doane, J. O.  
Dungherty, C. M.  
Drew, N. T.  
Dusell, J. G.  
Earl, J. O.  
Easton, W.  
Edgar, W. M.  
Edwards, F. G.  
Edwards, Henry  
Eldridge, J. O.  
Ellis, H. H.  
Ellis, W. T.  
Emery, J. S.  
English, Jas. L.  
Eyre, F. E.  
Fairbanks, H. T.  
Fargo, E. A.  
Farmer, E. T.  
Farrell, Edward  
Faulkner, Chas.  
Field, A. B.  
Fillmore, J. A.  
Fisher, Henry  
Flake, H. M.  
Fletcher, W. F.  
Flint, H. J.  
Foster, C. W.  
Foster, A. W.  
Foster, Samuel  
Foye, W. B.  
Freeman, F. S.  
French, F. J.  
Gallatin, A.  
Garrett, R. C.  
Garrett, W. T.  
Gaskill, R. C.  
Gates, Justin  
Giambloni, N.  
Olson, F. A.  
Gilbert, Geo. L.  
Githens, W. H.  
Gladwin, F. S.  
Gould, Wm. G.  
Grant, Wm. C.  
Graves, H. T.  
Graves, R. N.  
Griffith, C. R.  
Hall, C. T. B.  
Halsey, J. L.  
Hammock, John  
Hanson, E. H.  
Hartney, Wm.  
Haskell, D. H.  
Hatch, A. T.  
Hinds, Geo.  
Hines, J. D.  
Holtz, Louis F.  
Hook, T. H.  
Hopps, Louis W.  
Hopkins, J. L.  
Hopkins, T.  
Hosmer, H. L.  
Howard, C. W.  
Hulbard, A. S.  
Hudson, E. H.  
Hunt, John  
Irwin, C. F.  
Irwin, Wm.  
Jackson, A. B.  
January, W. A.  
Jarboe, J. R.  
Knapp, H. B.  
Knight, D. F.  
Knappe, T. J.  
Knoch, David  
Knox, Wm. F.  
Kroft, O. J.  
Kyle, Thos.  
Ladd, Geo. S.  
Laird, D. W.  
Lambie, W. T.  
Larner, John  
Lalor, Sol  
Lee, Bruce B.  
Lee, John  
Lippitt, P. S.  
Litchfield, J. M.  
Lloyd, R. H.  
Mayer, Samuel D.  
McAllister, A. A.  
McClure, David  
McComb, John  
McGinnis, Sr. J. E.  
McDonald, J. M.  
McFarland, A.  
McFadden, H. K.  
McKee, Wm. B.  
McKee, L. C.  
McKee, G. A.  
McKellan, Geo. F.  
McNitt, W. F.  
Menzies, S.  
Merritt, J. A.  
Merritt, James B.  
Merry, W. L.  
Merryfield, J. C.  
Metcalf, Geo. D.  
Mills, Edgar  
Montague, W. W.  
Morey, J. W.  
Morrow, W. W.  
Monser, S. M.  
Mutholland, Chas.  
Murray, N. H.  
Neff, J. H.  
Newell, T. W.  
Newhall, E. W.  
Pond, C. L.  
Potts, J. S.  
Powell, A.  
Preston, A. B.  
Preston, E. F.  
Preston, E. M.  
Price, Thomas  
Raimond, R. E.  
Ramelli, G. C.  
Ranlett, H. D.  
Redington, A. A.  
Reed, John S.  
Reeve, C. P.  
Shaffer, J. W.  
Shattuck, F. K.  
Shepherd, J. A.  
Sho, George  
Stimpson, James  
Skinner, J. D.  
Smith, Francis  
Smith, H. B. Jr.  
Spanning, Geo.  
Spanning, N. W.  
Spence, E. F.  
Spencer, R. M.  
Spring, T. W.  
Taylor, O. W.  
Taylor, John W.  
Thompson, G. H.  
Thompson, L.  
Threll, H. H.  
Tippet, Joseph E.  
Tittus, Isaac S.  
Townsend, Louis  
Townsend, F. G.  
Tracy, Theo. F.  
Tubbs, Hiram  
Tyler, J. G.  
Vall, A. H.  
Vanderburgh, W.  
Van Sicken, F. W.  
Varie, R. H. F.  
Viers, James  
Wagner, S. H.  
Ward, T. H.  
Waters, Wm. G.  
Weed, Alex.  
Wells, A. R.  
Wells, John T.  
Welsh, Benj.  
Wheeler, F. G.  
White, Martin  
Whitlock, J. H.  
Whitney, C. E.  
Wigginton, D. D.  
Woodward, E. W.  
Wilcox, W. J.  
William, Thos.  
Wilkins, R. T.  
Wiley, O. F.  
Williams, Geo. W.  
Williams, H. B.  
Willis, E. B.  
Wilson, H. C.  
Winans, J. W.  
Winterburn, G. H.  
Wood, Allen  
Woodward, E. W.  
Wyckoff, N.  
Younger, W. J.



## GRAND MASTER OF GRAND ENCAMPMENT, K. T. OF U. S.

Abell, Alex. G.  
Almeworth, J. C.  
Allen, Isaac P.  
Akerly, Benj.  
Anderson, James H.  
Anderson, T. H. B.  
Atkinson, E. C.  
Atlee, Wm. A.  
Badger, Wm. G.  
Barclay, P. T.  
Bart, T. R.  
Barker, Alfred  
Barnes, W. H. L.  
Barra, F. F.  
Bartlett, A. G.  
Bass, T. J.  
Bassett, Charles F.  
Bastion, J. G.  
Beach, C. W.  
Bechtel, F. R.  
Belcher, Wm. C.  
Benson, J. A.  
Benton, C. L.  
Bease, J. N.  
Bettis, F. A.  
Bicknell, J. D.  
Bishop, S. A.  
Blake, C. F., Sr.  
Blake, H. H.  
Blanchard, George G.  
Blanchard, N. W.  
Blaney, E. W.  
Bliss, R. H.  
Boone, R. W.  
Booth, A. G.  
Bray, George  
Bryngly, C. W.  
Brizze, W. E.  
Brimley, George T.  
Brown, C. F.  
Brown, F. E.  
Brown, Josiah P.  
Brown, R. R.  
Buckingham, A. E.  
Buckland, L. H.  
Bullington, J. M.  
Bump, G. H.  
Bunker, H. C.  
Burch, J. C.  
Borges, T.  
Borham, J. W.  
Buros, Henry J.  
Cahoon, W. B.  
Campbell, W. O.  
Carver, D. B.  
Casswell, T. H.  
Carton, F. M.  
Cayatte, T. J.  
Center, Wm.  
Chalmers, Alex.  
Chambers, A. H.  
Chalborn, G. B.  
Clapp, W. T.  
Clements John  
Clusky, Henry  
Cobb, H. A.  
Cochran, Wm. B.  
Cockrill, T. G.  
Coble, P. D.  
Cole, R. B.  
Coleman, C. C.  
Coleman, J. C.  
Coleman, Wm. T.  
Cone, J. S.  
Cook, Carroll  
Cook, Joseph W.  
Cooledge, I. B.  
Chamberlain, E. F.  
Chesley, C. C. H.  
Crane, B. G.  
Crane, L. T.  
Crow, A. H.  
Crocker, H.  
Curtis, John M.  
Curtis, N. G.  
Cutting, L. M.  
Dalton, F.  
Davies, Wm. A.  
Davis, C. H.  
Davis, Henry L.  
Davis, Isaac E.  
Davis, J. Z.  
Davis, M. S.  
Day, F. H.  
Dean, P.  
Dean, W. E.  
Denker, A. H.  
Dennis, S. W.  
Denison, S. C.  
De Witt, T. B.  
Doane, J. O.  
Dungherty, C. M.  
Drew, N. T.  
Dusell, J. G.  
Earl, J. O.  
Easton, W.  
Edgar, W. M.  
Edwards, F. G.  
Edwards, Henry  
Eldridge, J. O.  
Ellis, H. H.  
Ellis, W. T.  
Emery, J. S.  
English, Jas. L.  
Eyre, F. E.  
Fairbanks, H. T.  
Fargo, E. A.  
Farmer, E. T.  
Farrell, Edward  
Faulkner, Chas.  
Field, A. B.  
Fillmore, J. A.  
Fisher, Henry  
Flake, H. M.  
Fletcher, W. F.  
Flint, H. J.  
Foster, C. W.  
Foster, A. W.  
Foster, Samuel  
Foye, W. B.  
Freeman, F. S.  
French, F. J.  
Gallatin, A.  
Garrett, R. C.  
Garrett, W. T.  
Gaskill, R. C.  
Gates, Justin  
Giambloni, N.  
Olson, F. A.  
Gilbert, Geo. L.  
Githens, W. H.  
Gladwin, F. S.  
Gould, Wm. G.  
Grant, Wm. C.  
Graves, H. T.  
Graves, R. N.  
Griffith, C. R.  
Hall, C. T. B.  
Halsey, J. L.  
Hammock, John  
Hanson, E. H.  
Hartney, Wm.  
Haskell, D. H.  
Hatch, A. T.  
Hinds, Geo.  
Hines, J. D.  
Holtz, Louis F.  
Hook, T. H.  
Hopps, Louis W.  
Hopkins, J. L.  
Hopkins, T.  
Hosmer, H. L.  
Howard, C. W.  
Hulbard, A. S.  
Hudson, E. H.  
Hunt, John  
Irwin, C. F.  
Irwin, Wm.  
Jackson, A. B.  
January, W. A.  
Jarboe, J. R.  
Knapp, H. B.  
Knight, D. F.  
Knappe, T. J.  
Knoch, David  
Knox, Wm. F.  
Kroft, O. J.  
Kyle, Thos.  
Ladd, Geo. S.  
Laird, D. W.  
Lambie, W. T.  
Larner, John  
Lalor, Sol  
Lee, Bruce B.  
Lee, John  
Lippitt, P. S.  
Litchfield, J. M.  
Lloyd, R. H.  
Mayer, Samuel D.  
McAllister, A. A.  
McClure, David  
McComb, John  
McGinnis, Sr. J. E.  
McDonald, J. M.  
McFarland, A.  
McFadden, H. K.  
McKee, Wm. B.  
McKee, L. C.  
McKee, G. A.  
McKellan, Geo. F.  
McNitt, W. F.  
Menzies, S.  
Merritt, J. A.  
Merritt, James B.  
Merry, W. L.  
Merryfield, J. C.  
Metcalf, Geo. D.  
Mills, Edgar  
Montague, W. W.  
Morey, J. W.  
Morrow, W. W.  
Monser, S. M.  
Mutholland, Chas.  
Murray, N. H.  
Neff, J. H.  
Newell, T. W.  
Newhall, E. W.  
Pond, C. L.  
Potts, J. S.  
Powell, A.  
Preston, A. B.  
Preston, E. F.  
Preston, E. M.  
Price, Thomas  
Raimond, R. E.  
Ramelli, G. C.  
Ranlett, H. D.  
Redington, A. A.  
Reed, John S.  
Reeve, C. P.  
Shaffer, J. W.  
Shattuck, F. K.  
Shepherd, J. A.  
Sho, George  
Stimpson, James  
Skinner, J. D.  
Smith, Francis  
Smith, H. B. Jr.  
Spanning, Geo.  
Spanning, N. W.  
Spence, E. F.  
Spencer, R. M.  
Spring, T. W.  
Taylor, O. W.  
Taylor, John W.  
Thompson, G. H.  
Thompson, L.  
Threll, H. H.  
Tippet, Joseph E.  
Tittus, Isaac S.  
Townsend, Louis  
Townsend, F. G.  
Tracy, Theo. F.  
Tubbs, Hiram  
Tyler, J. G.  
Vall, A. H.  
Vanderburgh, W.  
Van Sicken, F. W.  
Varie, R. H. F.  
Viers, James  
Wagner, S. H.  
Ward, T. H.  
Waters, Wm. G.  
Weed, Alex.  
Wells, A. R.  
Wells, John T.  
Welsh, Benj.  
Wheeler, F. G.  
White, Martin  
Whitlock, J. H.  
Whitney, C. E.  
Wigginton, D. D.  
Woodward, E. W.  
Wilcox, W. J.  
William, Thos.  
Wilkins, R. T.  
Wiley, O. F.  
Williams, Geo. W.  
Williams, H. B.  
Willis, E. B.  
Wilson, H. C.  
Winans, J. W.  
Winterburn, G. H.  
Wood, Allen  
Woodward, E. W.  
Wyckoff, N.  
Younger, W. J.

## Reception Committee.

Center, Wm. Morrow, W. W. Clusky, Henry,  
Chairman Vice-Chairman Secretary  
Abell, Alex. G. Keefel, C. J.  
Atkinson, E. C. Kyle, Thos.  
Barclay, P. T. Lott, C. F.  
Belcher, W. C. Lloyd, R. H.  
Blake, H. H. Lippitt, E. S.  
Beach, C. W. Lee, Bruce B.  
Barrs, F. F. Lambie, W. T.  
Blake, Chas. E. Sr. Laird, D. W.  
Bartlett, A. G. Locke, Isaac S.  
Bicknell, J. D. Merrill, John F.  
Brown, C. F. Marlin, Alex.  
Brown, R. B. Murray, N. H.  
Clusky, Henry. McKee, W. W.  
Coleman, Wm. T. Metankin, H. K.  
Cobb, H. A. McLellan, Geo. F.  
Curtis, N. G. Norris, William  
Chalmers, G. B. T. Owens, J. J.  
Oaswell, T. H. Osborn, R. F.  
Cook, J. W. Overton, C. F.  
Clapp, W. T. Farlee, E. H.  
Cayatte, T. J. Price, Thomas  
Dewitt, T. B. Thomas  
Davis, H. L. Preslon, E. F.  
Davies, W. A. Powell, A.  
Dougherty, C. M. Putte, J. S.  
Dean, Peter. Redington, A. A.  
Denker, A. H. Rindell, Wm.  
English, J. L. Relser, Theo.  
Foster, S. Romaine, N. T.  
Garratt, Wm. T. Ryan, M.  
Goad, W. F. Staudt, F. D.  
Gallatin, Albert. Searles, Niles  
Gates, Justin. Sumner, F. W.  
Gould, W. G. Sullivan, E. L.  
Gibson, F. A. Stanley, J. Q. A.  
Harvey, Wm. Spence, E. F.  
Hawley, C. A. Taylor, John W.  
Howard, C. W. Threll, H. H.  
Hedges, E. R. Tittus, Isaac S.  
Hatch, J. H. Wells, John T.  
Hawley, E. A. Wheeler, O. C.  
Hinds, George. Wigginton, P. D.  
Hewitt, E. E. Winans, Joseph W.  
Johnson, George. Winterburn, G. H.  
Jarboe, John R. Waterhouse, C.  
January, W. A. Wilcox, W. J.  
Johnson, Geo. A. Ward, T. H.  
Knox, W. F.

## THE WONDERS OF THE YOSEMITE VALLEY.

The following tabulated statements show the height of the walls, peaks and water-falls of the Yosemite Valley.

Height of Walls and Peaks.	
Name.	Feet.
Clonde Rest.....	6,480
Half Dome.....	5,160
Mount Star King.....	5,000
Sentinel Dome.....	4,680
Cap of Liberty.....	4,400
Three Brothers.....	3,700
Three Graces.....	3,750
Glacier Point.....	3,760
North Dome.....	3,760
Sentinel.....	3,300
El Capitan.....	3,300
Inspiration Point.....	3,260
Cathedral Point.....	2,600
Round Tower.....	2,400
Cathedral Spices.....	2,400
Union Point.....	2,380
Washington Tower.....	2,200

Height of Water Falls.	
Name.	Feet.
Sentinel Falls.....	3,850
Yosemite Falls.....	2,634
Rever Arch Falls.....	2,000
Bridal Veil Falls.....	940
Nevada Falls.....	700
South Canon Falls.....	600
Vernal Falls.....	350

## WOOL CROP.

The Grizzly Herald says: Sheep men report for many years. Among the really remarkable averages we hear of, is that of J. D. Brazenton, whose herd of 1,000 averaged three and a half pounds each. This is a big average, yet smaller bands can be cited where the average is greater. There are thousands of acres of foothill land in the county especially adapted to sheep raising, and in time the industry is likely to become one of the most profitable pursued by our people.

## COLONY.

There is considerable talk of planting a colony in the tesian belt in Tular.



## CALIFORNIA.

## General Outlines and Physical Features—Mountains, Valleys and Natural Wonders.

## Agricultural—Horticultural—Timber and Mineral Lands—Soil and Climate.

## Railroads—Commerce and Manufactures—Resources and Advantages.

## Population—Present and Future Prospects.

A great deal has been written about California, for the past 35 years, ever since the discovery of gold, on the 19th day of January, 1848. No other country, on the face of the globe, has had such a notoriety as California possesses. A great deal has been said, by parties almost wholly unacquainted with this wonderful country, which, of course, is unreliable information. In fact, there is but one way to gain a correct knowledge of California, and that is by personal observation and careful study. As we have traveled continually, for several years, and visited every section of California, in the interest of this journal, we will endeavor to give a correct description, in the following article:

only five or six miles wide, and terminates in the great basin, which is from 4,000 to 5,000 feet above the sea level. The Coast Range, as its name indicates, runs along the coast. This range averages from 2,000 to 4,000 feet in height. Between the Sierra Nevada and the Coast Range lies

## The Great Basin.

Bearing the double name of the Sacramento and San Joaquin valleys, although really but one geographical formation. This valley extends north, and south, about 400 miles, with an average breadth of from 50 to 60 miles, and presents evidences of once being a vast lake. It is drained, from the north, by the Sacramento, the longest river in the State, and from the south, by the San Joaquin, the longest river in California, which, after meeting and uniting in the center of the basin, breaks through the Coast Range. Along the great rivers the valleys are generally low, level, and extremely fertile, rising into undulating slopes and low hills as the mountains are approached on either side, and broken on the east by numerous spurs from the Sierra. At the north end, between lat. 40 degs. and 42 degs., is a high table-land or plateau, about 110 miles long, and 5,000 feet above ocean level, lying between the main chain of the Sierra Nevada, and a branch which extends northwest towards Mount Shasta. The plateau is an independent basin; its waters do not leave it, but flow into a chain of lakes located in the extreme north-east corner of the State.

The great basin of Utah, a mountainous, barren

in San Francisco, is \$50,000,000. The grand total value of the precious metals of the coast amounts to more than \$80,000,000 annually, principally centered in San Francisco.

Forty-three years ago, there were but a few mission gardens and small bands of cattle and horses here; thirty-three years ago the pioneer miners had begun their work with pan and pick, rocker and long-tail; twenty-eight years ago, a few men, called enthusiasts by some, crazy by others, began to farm and plant orchards in valleys, and make homes. Twenty-three years ago railroad building was commenced, and only twelve years ago agricultural interests of the State began to develop with energy, and the planting of orchards received an impetus which has continued with accelerated speed ever since. These few people have made California the first State in the Union in wheat, barley, wine, wool, gold, fruit and quicksilver; and California is, today, the fourth State in the Union, according to population, in her manufacturing industries.

## Commerce.

Among the primary and fundamental claims which California has upon the attention of home-seekers, her commercial situation may be mentioned. The communities, which are near the sea shore, have advantages over those farther inland, as they thus obtain healthy competition in carrying their products. There is no reason to doubt that the same growth that has built up such pros-

perity in any other country in the world. Properly speaking, California has several climates, the basin of the Sacramento and San Joaquin having one, the western slope of the Coast Range, north of latitude 35 degs. another, and the portion of the State south of 35 degs. still another. The climate west of the Coast Range is different from the east of the same range, which is less than 60 miles in width. At San Francisco the mercury seldom rises above 80 degs. in the day, or falls below 40 degs. in the night season. Snow seldom falls here, and the winters bear a strong resemblance to the Indian summer of the Mississippi valley. It is doubtful if any other country in the world has such cool summers and mild winters. The coolness of the summer nights is attributed to the extreme clearness of the atmosphere favoring radiation. The wind blows, for a part of each day, from the north and north-west along the coast nearly the whole year. In the interior the extremes are much greater, the mercury in the Sacramento valley often rising, in summer, to 110 degs., and along the south-eastern line of the State as high as 140 degs.; but, owing to the extreme dryness of the atmosphere, this great heat is not prostrating, as on the Atlantic Slope, the nights being cool and refreshing. The climates of central California may be grouped into coast climate, climate of the interior, and climate of the Sierra slope. The first has a small range of temperature, and some fog and sea breeze. The second has a greater summer temperature than on the coast, a



A PORTION OF SAN FRANCISCO, LOOKING TOWARDS OAKLAND.

By looking over the map of the world, we find California situated on the Pacific Ocean, between lat. 32 degs. 20 min. and 42 degs. north, and lon. 114 degs. 20 min. and 124 degs. 25 min. west. It is bounded on the north by Oregon; east by Nevada and Arizona, following the Sierra Nevada Mountains on the line of lon. 120 degs. west to lat. 39 degs. thence south-east to the Colorado river, on the 35th parallel, and thence by the course of that river, south by the Mexican Territory of Lower California; and west by the Pacific Ocean. The outline of this State is very irregular. Its general direction, lengthwise, is north-west and south-east, and a line drawn through the center, following the curves of its eastern and western boundaries would measure about 770 miles. The greatest breadth is about 320 miles, least breadth, 150 miles, and the average is about 230 miles. In size it is the second State in the Union, its area being 158,369 square miles. In 1880 it had a population of 289,577, exclusive of Chinese and Indians. Geographically it is divided into 62 counties.

The most striking feature in its physical geography is the existence of two great ranges of mountains, running north-east and south-west, and generally parallel, called the Sierra Nevada and the Coast Range. The Sierra Nevada is the most lofty and rugged, its summit being generally above the region of perpetual snow, and has but few of those very elevated peaks. It is 500 miles long and 80 miles wide, with an altitude varying from 5,000 to 14,000 feet. Nearly its whole width is occupied with its western slope, which descends to a level of 300 feet above the ocean, while the eastern slope is

tract of land, having an elevation of 4,000 to 5,000 feet, with no outlet for its waters, extends into the south-east portion of California. This region is exceedingly arid and sterile, and is cut up by numerous irregular ridges of low, rocky mountains, with intervening valleys of an almost volcanic matter. On the south-east border is a district about 140 miles long by 75 miles wide, which belongs to the Colorado basin, and is known as the Mohave desert. The Coast Range is divided, in its length, by long, narrow, fertile valleys.

Of the total area of the State, one-fifth is desert, and two-fifths are mountains unfit for tillage, but with extensive districts valuable for pasture, timber and minerals, leaving two-fifths susceptible of cultivation—though some portions of it can not be used with profit, until irrigated, protected against overflow by dykes, and drained of its superabundant water, or made accessible by railroad. The State has 100,000,000 acres, including 13,432,622 acres of unsurveyed public lands, and 77,500,018 acres of surveyed public lands. The surveyed lands include 8,000,000 acres of private grants and 1,500,000 acres of swamp lands.

California has a population of less than 300,000 persons, scattered over a territory larger than England, Ireland, Scotland and Wales, yet the total annual production of the mines, farms, manufactures, vineyards and orchards, carried on by these persons, amount to over \$150,000,000. The people have nearly \$150,000,000 in savings and other banks, and various corporations pay dividends of about \$30,000,000. The yearly sales of real estate amount to \$65,000,000. The earnings of the mint,

persons cities as Boston, New York, and other cities along the Atlantic shores, is in full operation here. The commerce of the Pacific, and of the west coast of South America, Mexico and Central America is centered here. The great nation, of which we are a part, must draw its share of the precious commerce of the Orient through these gates. Whatever dominions wide-reaching and powerful, are yet reserved for the English-speaking race in the sweep of the Pacific, and about its coasts, no student of the earth's surface can fail to believe that the largest portion will be in the hands of Pacific Coast men, from Alaska to Mexico. The commercial center of this territory is about the bay of San Francisco. Here, is the harbor, the best location, the many beginnings, the present capital. Other cities will spring up along the northern and southern coast, with commercial piers and make rich men by the score; but here is the metropolis, which, if the men of California are true to themselves, and rightly use their advantages, may some day be greater than London, more lovely alive than Paris, more picturesque than Venice, more enriched with temples and works of art than was Rome in her palmy days.

## Soil and Climate.

The second great advantage which this coast presents is its variety of soil and climate; hence its production. The climate of California, in different parts, varies greatly, irrespective of the great range of latitude 35 degs., through which the State extends. It differs widely from that of the Atlantic slope, in the same latitude, and probably

dry, northerly wind at times, and no fog. On the Sierra slope, also northward in the Coast Range, the climate, as we ascend, approaches more and more to that of New England, until we reach the snow line. In many counties, 30 miles' travel takes one from where oranges grow to where only the hardy fruit-trees prosper. The general features of these three climates, of which we have spoken, mingle, or are interchanged, according as the valleys open toward the sea, or away from it, or slope northward or south. In every county in the State, except a few along the upper Sierras, the entire range of temperate zone, fruits, grains, and other products, together with many of the semi-tropical fruits can be grown with ease. Specimens of wild plants of the entire Atlantic Coast, from Maine to Florida, with the flora of Japan, China and the Himalaya region, can easily be made to thrive in an orchard, in California. Australia contributes largely to our gardens, and Mexican, Chilean, and Peruvian plants find congenial homes in California soil. The horticulture of the future will be one of surprising variety, as the horticulturist becomes better acquainted with the soil, which is of all sorts and characters.

## Seasons.

California has a rainy and a dry season, the former nearly corresponding to the winter, and the latter to the summer of the Atlantic region. The rains begin at the north early in autumn, but do not fall in the latitude of San Francisco in any appreciable quantity until about the middle of December, which is the month of greatest rain. The rainy season terminates towards the end of May,



June, July, August and September are dry, only 2.5 inches of rain having fallen in these months, collectively, in eighteen years. The average rainfall for, in inches, the seasons and the year, at different localities, is:

PLACES.	Spring.	Sum'cr.	Aut'umn.	Winter.	Year.
San Francisco.	6.64	.13	3.31	11.33	21.41
Sacramento.	7.01	.60	2.61	12.11	21.73
Humboldt Bay.	13.51	1.13	4.87	16.03	31.55
Fort Yuma.	0.27	1.30	0.68	0.72	3.15
San Diego.	2.74	0.55	1.24	6.60	10.43

Snow is very rive on the coast and in the valleys, and never remains for many days, except in the Klamath river valley, in the north-west portion of the State. There are many mining towns high up in the mountains where the snow falls to a great depth, and lies till late in the spring. There are many parts of California where the rainfall is not more than from 10 to 12 inches, on an average, and when it falls below this, artificial irrigation is usually needed. From Goshen to Caliente, 100 miles along the upper San Joaquin valley, the rainfall is too light to secure crops in ordinary seasons, but the adjacent Sierras contain an enormous area of 4,000 square miles, with an average precipitation of over 50 inches. In this portion of the State, large tracts of land are so situated as to be well irrigated at slight cost. The upper half of California has sufficient rain for the production of all kinds of crops, except fruit and grapes in the

waterfalls at various points—eleven in all. The river, from these falls, mainly forms the Merced, which runs through the valley. Some of these falls are wonderful and marvelous in their grandeur, sublimity and magnitudes. The falls of Niagara, one of the wonders of the world, are only 163 feet high, while the Yo Semite fall leaps down 1,600 feet at a single bound, where it falls on a rocky platform, perhaps 30 feet wide, then leaps down 600 feet more on to a similar rocky table, from which it makes another clear fall of 434 feet to the rocky debris at the bottom of the valley, making a total of 2,634 feet, which is sixteen times higher than that of Niagara. More wonderful still is the leap of the Sentinel Cascade, about three-quarters of a mile to the front; it has a fall, in a single leap, of 2,275 feet. The eleven distinct waterfalls, in the Yo Semite valley, are tallied thus: Cataract, 900 feet; Bridal Veil, 630; Yo Semite, 2,634; first, 1,600; second, 600; third, 434; Vernal, 350; Nevada, 700; South Fork, 600; Royal Arch, 1,000; and Sentinel, 3,000. It is impossible to describe Yo Semite so as to give one who has not seen it even a faint idea of its wonderful, strange and magnificent scenery. In the same section of California are the noted

#### Big Trees.

Of which there are several groves in the State. The most noted is the Big Tree Grove in Calaveras county. At an elevation of 4,875 feet above the sea, and within an area of 50 acres, are 108 trees, twenty of which exceed 75 feet in circumference.

that one can look so deeply into the interior of the earth as here, its surface being 280 feet below the level of the ocean. Looking down from the mountain side, into this deep, wide, vast basin, with its shining beds of soda, salt and borax, which cover thousands of acres, and blaze and shimmer in the steady glare of light which pours upon them from a cloudless sky; blazing with the reflection of chemical deposit left by the receding sea that here once ebbed and flowed, but where now scarcely a drop of rain falls; it is surrounded by barren, volcanic mountains, making this indeed one of the most wonderful places for the daring prospector or tourist to enter.

#### Lake Tahoe.

One of the most remarkable bodies of water in the world, lying at an altitude of 6,128 feet above the sea level, is 23 miles long and 15 wide, in the form of a parallelogram, extending north-east and south-west, partly in California and partly in Nevada. The greatest depth yet found is 1,800 feet, and the water is so clear that trout can be seen from 80 to 100 feet on its pebbly bottom. Owing to the altitude and the rarity of the atmosphere, the water has little buoyancy, and nothing is ever seen floating on the lake, except the beautiful little steamers and pleasure and fishing boats; the bodies of persons drowned in this lake never rise—are never seen again. Lake Tahoe is the great sanitarium of the Pacific Coast. The mountains around it are from 2,000 to 3,000 feet higher than the lake. Near by, on the line of the C. P. R. R., is

which bursts out in a roaring cloud of steam. California is not without her natural bridges, five of which have been discovered; the largest of these is on a small creek emptying into the Hay fork of Trinity river, and is 80 feet long, with its top 170 feet above the water. In Siskiyou county there are two, each 90 feet long; and on Cayote Creek, in Tuolumne county, there are also two, the largest being 285 feet long. Numerous caves are found in nearly every mountain county in the State; perhaps the most noted is Alabaster cave in Placer county, containing two chambers, the largest being 200x100 feet. The Bower cave, in Mariposa county, has a chamber 100 feet square. Croyte caves, in Calaveras county, are among the most beautiful sights in the State. Remarkable mud volcanoes exist in Inyo county, whose surfaces are below the level of the sea, covering an area of a quarter of a mile long by one-eighth of a mile in width; they consist of soft mud, through which hot water and steam are constantly escaping, keeping the mud in continuous movement. Innumerable mineral springs are found all over California, which are described in the county descriptions.

#### Railroads.

California has 23 lines of railroad, amounting to 4,265 miles, nearly all centering in San Francisco. The most important are the Central and Southern Pacific, and the leased lines, reaching through the principal valleys of the State. The S. F. & N. P. C. R. R. traverses the entire length of Sonoma



VIEW OF BERKELEY, CALIFORNIA.

Sacramento valley. No irrigation is required in the valleys of the Coast Range. A marked phenomenon of the climate is the comparative absence of thunder and lightning. During autumn many of the rivers sink in the sand soon after leaving the mountains in which they rise. Vegetation dries up during the long, dry season. The soil, climate, timber, cereals, fruits, and vegetables will be more specially noticed in the different county descriptions.

#### Natural Wonders.

First among the natural curiosities of California is the valley of the Yo Semite, with its surrounding escarpments and mountain peaks. It is situated in Mariposa county, on the west slope of the Sierras, midway between the east and west base, at an elevation of 4,000 feet. It is 112 miles, in a direct line, a little south of east, from San Francisco, but about 200 miles from any of the traveled routes. Here, within a space of less than 20 miles long and 10 miles wide, is probably presented more grand and beautiful scenery than is found in any similar area in the world. The valley proper contains about 8,400 acres, one-half of which is meadow land, and the whole is as level as a floor, except at the sides of the mountain walls, where the debris has fallen down. One can not resist the impression that this valley was, at one time, at the same altitude as that of the surrounding mountains, and that by some convulsion of nature the valley had sunk to the distance of about a mile below its original height, leaving perpendicular walls of granite on all sides, that stand up from three-quarters to one mile high. Over the sides of the rim of the valley, at the depression, there are

They were discovered in 1850. One of these giants has been felled; to accomplish this task pump-boring augurs were used, and the constant toil of five men 25 days; but when this completely severed, two and a half days' labor, with various mechanical appliances, were required to throw it from its broad base. This tree was 302 feet high and 96 feet in circumference at the ground, and its annual growth lines showed over 3,000 years of life. A house is built on its stump for theatrical and other entertainments. A splendid hotel is kept in the grove. About seven miles south is what is known as South Grove. The other groves of these giants are two in Mariposa county near the Yosemite Valley. Just south of it, in Tuolumne county, is another; still further south, in the eastern part of Merced and Fresno, another; and farther south still in Tulare county, among the tallest mountain peaks, another. These are the only places, in the known world, where this timber is known to exist. The same given to the timber is "Sequoias." It is a species of redwood, or at least it resembles the California redwood somewhat, and to Eastern people I can compare it to the nearest red cedar.

#### Death Valley.

One of the most wonderful and least-known countries on the continent, is situated in south-eastern California, in Inyo county, and lies east of Owens river valley, a distance of nearly 100 miles. It is reached by trails that stretch across wide mesas of cacti and volcanic remains, and over mountains that rise here and there under a sultry and burning sun. This wonderful valley extends for 100 miles north-east and south-west, and is from 30 to 40 miles wide. There is no other landscape

#### Dinner Lake.

One of the loveliest lakes in California, and for grand and sublime scenery is unequalled on the coast. The north from here, up in Plumas county, is Crystal Lake, which is one of the natural wonders. In the bottom of this lake may be seen large forest trees, standing in hundreds of feet of water, undergoing the course of petrification. The formation of this lake is of modern date, and was formed by a mountain sliding into the mouth of the canyon, which is now covered with water from the melting snows of the surrounding mountains.

The petrified forest, 75 miles from San Francisco, where portions of nearly 100 distinct trees of great size, prostrate and scattered over a tract three or four miles in extent, are found, some on the surface and others projecting from the mountain side. The silicified trees appear, upon examination, to have been coniferous. A few miles north bring us to the

#### Geysers.

One of nature's chemical laboratories, located about 110 miles north-west from San Francisco; it is visited by thousands of tourists, and is reached either via Cloverdale or Calistoga, by rail, thence a short distance by stage, over a picturesque route. A narrow valley or canyon is filled with flowing hot springs, and the soil is covered with a crust of sulphur, iron rust and other mineral deposits, and filled with steam from the boiling waters. Through the crevices of the rocks, found all over the surface of the canyon, the steam shoots and hisses, while the sulphur and alum crystals gleam in the sunlight. The questionable ground shakes and is hot beneath your feet; the air is thick with vapor

valley. The Oregon Division of the Central Pacific is now being built north to the State line, where it connects with the California and Oregon Railroad, making a through line between San Francisco and Portland, Oregon. Other railroads are being built in various parts of the State, which are noticed in the different county descriptions, together with the ocean and steamer lines. The physical characteristics of the State, giving the timber, soil, minerals, etc., are classified under the different county descriptions.

#### ALAMEDA COUNTY.

This county, separated from San Francisco by the bay, contains 512,000 acres, 487,243 of which are assessed, leaving only 24,807 acres of waste land, some of which is partially covered by water from the bay, the remainder being mountain waste. It has nearly every variety of land, from low level tide lands to rolling mountain grazing lands. Along the bay, on its west side, is a strip of land from six to fifteen miles wide that is from a few to several hundred feet above the sea level, all of the very choicest agricultural land. Along the water's edge there are from 20,000 to 25,000 acres of tide land, a great portion of which has been reclaimed. In the eastern portion of the county is Livermore valley, which is an elevated plain, from 350 to 500 feet above sea level; this valley is from twelve to fifteen miles in length and from four to eight miles in width, and is surrounded by a low range of mountains. Alameda is well watered by numerous creeks, which rise in the upper portion of the county and empty into the bay.



**Oakland.**

The second largest city in California, which has a white population of 35,000, and, as a place of residence, is acknowledged to be surpassed by no other city in the Union. Her location is on the east side of the bay, immediately opposite San Francisco, with which place she is connected by several railroad and ferry lines. Steam-cars run to nearly every part of the city, besides the eight different lines of street railways leading to Alameda, East Oakland, Berkeley, and Fruitvale. The harbor and railroad improvements, and the building of the sewer and dredging out of the bay by the Government, will make this a great commercial center.

The educational facilities in Alameda county are fully up to the highest standard. Here, are located the State University, California Medical College, Military Academy, theological seminaries, grammar schools, etc. Several large manufacturing industries have recently been inaugurated. Among them are the Hudson Manufacturing Company, with a capital stock of \$1,000,000, that manufactures various kinds of agricultural implements, etc.

The towns of Livermore and Pleasanton are situated in Livermore valley, in a fine agricultural country; while Hayward, San Leandro, Centerville, Alvarado, Newark, and Niles are all situated on the bay side of the mountains. In all the towns of this county are churches of all denominations.

the west fork of Carson river, at the base of a mountain, where the snow-capped peaks of the Sierras can nearly always be seen. The town contains less than 250 inhabitants.

**Monitor.**

The second village in Alpine, is located some eight miles southeast of Markleville, and is situated in a narrow canyon, with fine quartz mines on all sides. The large No. 2 Colorado quartz mills are located here. The town contains 200 people, who are principally miners.

**Silver Mountain.**

Is a small town located on the banks of Silver creek, at the foot of Silver mountain, and is about eleven miles southeast of Markleville.

This county has vast forests of pine, fir, spruce, tamarack, etc. The climate, in summer, is mild and healthful, the average temperature giving about 75 degs., and in winter about 40 degs.

**AMADOR COUNTY.**

Contains an area of 300,000 acres of land. The principal valley is the lone, situated in the southwest portion. Its soil is of a loose sandy loam and is very fertile; it is divided by into beautiful little farms, orchards and meadows, much of the surrounding hillsides are planted to vineyard. In the smaller valleys, where water is brought in for irrigation, considerable alfalfa is raised. Unlike many mining regions, Amador has an extraordi-

nary it has over 1,000 inhabitants. It is strictly a mining town. Seven miles from Amador City, situated on an open plain, or table land, lies the town of

**Plymouth.**

Which contains about 600 inhabitants. Here, also, is heard the heavy stamp of quartz mills, grinding away, day and night, the whole year round.

The Amador Canal Company, a corporation which has extensive water works, furnishes water to Jackson, Lone City, Amador City, and Plymouth. The water is taken from the Mokelumne river, by ditches and pipes, to large reservoirs, from whence it is distributed in pipes to the different towns and mines.

The other towns are Vulcan, Oleta and Drytown, each with a population of from 200 to 300. The census of 1880 gave Amador county a population of 11,386.

**BUTTE COUNTY.**

Is one of the largest in California, embracing an area of 1,305,410 acres, which are classified as follows: mineral, 552,360; timber lands, 568,640; agricultural, 195,840. The western part of Butte is comparatively level, and embraces most of the farming lands, while the eastern side is hilly and mountainous, and includes all the mines. The county is well watered by the Sacramento and Feather rivers. The soil, along the river bottoms,

acknowledged to be one of the handsomest and best-tilled farms in California.

**Oraville.**

The county seat, is 21 miles southwest of Chico. The country south and west of Oraville is a fine farming region, while in the foothills, near the town, there is considerable mining. The population is about 1,800. Oraville commands an extensive mountain trade, reaching into northeastern California for more than one hundred miles. Some heavy merchants have done business here for many years, and have become quite wealthy. A fine new flouring mill has recently been built; several stage lines center in from Plumas and Lassen counties, on the north, and Yuba, on the south, besides the lines from Chico and Biggs.

The other towns are Grailley, Biggs, Nelson, Durham, and Noril, all located on the O. D. of the C. P. R. R., in the western part of the county, and surrounded by fine agricultural land. Butte has immense forests of sugar, yellow, and nut pine timber. This timber belt is in the eastern mountainous part of the county. The climate of Butte is generally pleasant. The rainfall for Oraville will average from 20 to 24 inches. Snow seldom falls below an altitude of 1,200 feet. On the more mountainous parts of the county it falls to a depth of over two feet.

**CALAVERAS COUNTY.**

Lying immediately east of San Joaquin, has an



BIRD'S-EYE VIEW OF SAN FRANCISCO.

**ALPINE COUNTY.**

Is located in the extreme eastern part of California, bordering on the State of Nevada. The greater portion of the county lies at a very high altitude, reaching from 4,000 to 11,000 feet above the sea level. It is strictly a mining county. There are some very rich quartz mines within her borders, some of the most noted of which are the IXB, Exchequer, Isabella, and many others. This county is exceedingly well watered, as the Carson river rises in the southern part of it, and flows north. It is fed by numerous mountain streams, such as the East fork, West fork, Wood creek, Silver creek, Monitor creek, Smith's creek, Mogul creek, Indian creek, etc., which all head up in the Sierras, amid perpetual snow. Among these mountains are numerous valleys; the largest and most noted are Diamond, Hornet, Pleasant, Faith, Hope and Charity valleys. Diamond valley contains the principal farming lands, producing barley, hay, oats, potatoes and some wheat, which find a ready market among the miners in the vicinity. The three sister valleys, Faith, Hope and Charity, are located in the northwestern part of the county, at an altitude of 7,500 feet. These valleys are inhabited only during the summer months, and then only by stockmen and dairymen. In Pleasant valley large quantities of hay are cut annually. There are many smaller valleys in the county, where sheep and cattle are grazed during the summer season. The large amount of stock which grazes here is driven from other adjacent counties of California and Nevada.

**Markleville.**

The county seat, is located on the east bank of

my soil. Increasing quantities are cleared and improved annually; the productions of which are, wheat, barley, alfalfa, potatoes, wine and fruit. The foot-hills, and especially the valleys of the lower portion of the county, are very favorable localities for fine fruits and grapes.

The mineral resources of the county are coal, copper, gold. Large piles of pulverized rock attest the fact that some of the mines must have been sunk to a great depth. The coal-belted Amador is down 2,200 feet, the Mahoney, 800, and is still going deeper. The Keystone, and other mines in the vicinity, are all in active operation. The first town that is reached is

**Lone City.**

Which is 133 miles northeast from San Francisco, at the terminus of the Amador branch of the C. P. R. R. It occupies a site on the edge of a lovely valley, which bears the same name, and is a thriving town, of about 650 people. About twelve miles northeast, by stage, is

**Jackson.**

The county seat, which lies in a beautiful little valley, surrounded on all sides by high hills; it contains about 1,200 inhabitants. Four miles from Jackson, by stage, we arrive at

**Sutter Creek.**

Still the scene of active mining operations, principally gold quartz. A half-hour's stage ride, in mid-summer of the largest mines in the county, brings us to

**Amador City.**

The liveliest mountain town in this section. It is but a few years since a town was started here, and

is a rich, sandy loam. Between the Sacramento and Feather rivers lies an immense tract of black adobe land, very productive in ordinary years, but liable to overflow during the wet season. Near the foot-hills there is a belt of red lands, formerly thought not worth farming; but, during the past few years, many small farms have been successfully tilled, as the land constantly improves by cultivation. The foot-hills contain land valuable for farming purposes, though, at present, very little of it is under cultivation. Feather river has three forks, or branches, crossing the mining section, dividing the hilly portion into several extensive regions. Along the various streams, and on the several ridges are the principal mines. The immense hydraulic mines of Cherokee Flat are, perhaps, the most gigantic in the State. Hills, several hundred feet high, have been rushed away to the bed-rock. These are considered as among the best-paying mines in the State. There are about 80 miles of large ditches and over six miles of iron pipe leading to the mines, supplying about 2,200 inches of water per day. The cost of the ditches and reservoirs is nearly half a million of dollars. From twelve to sixteen hydraulic giants are at work, and a large number of men are constantly employed. There are many other mines in the county; the principal localities are Wyandott, Bangor, Forelstone, Cherokee, Mountain House, Dogtown, Lomlocks and Luskip.

**Chico.**

The largest town, is situated in a rich agricultural country. The town is one of the handsomest in the State; it now has about 3,800 inhabitants. Adjoining the town is Gen. John Bidwell's farm,

area of 622,000 acres. The entire county may justly be regarded as a bed of mineral deposits, gold, preeminently; the baser metals, such as copper, iron, and chlorine are abundant, besides the magnificent lodges of marble, limestone, and granite, and her undeveloped beds of coal, which are known to exist. The principal natural wonders of the county are the world-renowned Big Trees, the extensive cave, with its truly charming chambers, and the wonderful natural bridge, all of which are annually visited by tourists from all parts of the world. The immense timber belt, for granite, extent, diversity, and magnificent proportions, has no parallel in the entire timber belt on the western slope of the Sierras. Calaveras is one of the best watered sections in the State.

**San Andreas.**

The county seat, is an old mining town, and now has a population of 800.

West Point is the extreme town on the north-west; Mokelumne Hill on the west corner; Camp Seco and Comanche on the southwest; Jany Land and Milton on the south; Copernicus on the southeast; Alconillo and Angels' Camp on the east corner; Vileto, Murphy's and Sheep Ranch on the northeast of the county, where all supplies for the central and eastern portions of the county are received and distributed; stage lines diverge to San Andreas, Sheep Ranch, Copernicus, Angels', Murphy's, the Big Tree groves and Sonoma. A daily stage line also runs from Lodi, on the C. P. R. R., to the Grati mine and Mokelumne Hill, intersecting with the Jackson and Amador line via Gold and Lone City. The undeveloped resources of this county are almost inexhaustible.



**COLUSA COUNTY**

Comprises a large portion of the great Sacramento valley, having an area of 1,472,000 acres. Of this vast territory, about 300,000 acres lie along the Sacramento valley. As the summit of the Coast Range forms the western boundary, the balance of the county is composed of mountains, low hills and small valleys. The valley portion of this balance is estimated at 28,000 acres, the low hills at 480,000 acres and the remainder, about 4,000 acres, is mountain waste. The best land is along the streams, and especially along the Sacramento river, which runs almost due south, forming the western boundary of the county for eighteen miles, then runs through the county, 24 miles, in a straight line, and then forms the eastern boundary. The soil along the river is of a sedimentary, decomposed vegetable nature, making the most productive land in the world. Colusa county is watered by the Sacramento river. The river is navigable all the year round, to the upper end of the county. Eighteen miles north of the south boundary of the county is Butte slough, which is a large estuary, nearly one-fifth the size of the Sacramento river, and runs in a southeasterly direction in Sutter county, where it is lost in the tule basin formed by the Sacramento and Feather rivers. Sycamore slough leaves the river on the west side some four miles below Butte slough; the great slough flowing into the river from the tule to Knight's Landing, in Yolo county, and about 30 miles from the head of the slough, takes the name of the Lower Sycamore, and the large body of fertile land between the slough, and Yolo, Sutter and Colusa counties, is known as Knight island.

The census of 1880 gave Colusa a population of

13,118; and to this an increase of about 1,000 for the past two years.

Colusa is not classed as a mining county, yet there is both gold and quicksilver found within her borders. Colusa is not without her mineral springs.

**Colusa.**

The county seat, has a population of 3,000; it is regularly laid off with wide streets, and has some very good and substantial business blocks. Ten miles west, on the C. P. R. R. (O. D.), is the town of

**Williams.**

Named after Mr. W. H. Williams, the founder of the town. There are, at present, about 400 inhabitants. The town is supported by the wheat-farming country that surrounds it on all sides.

**Maxwell.**

Situated on a level plain, has a population of about 250. The immense grain warehouses located here are positive proofs that this is one of the finest wheat-producing sections in the State.

**Willows.**

The second largest town in Colusa county, is located on a level plain in a fine agricultural country. The business portion of the town was nearly all destroyed by fire last fall, but is now rebuilt. Midway between Maxwell and Willows is the village of

**Germanatown.**

Situated in a fine wheat section. It contains about 200 inhabitants, several large grain warehouses, two hotels, and a few general stores. We now pass on north to the village of

**Orland.**

Situated on both sides of the railroad, in a fine agricultural country. It has a population of 450.

**Princeton.**

Is situated in the northwestern part of the county,

on the river, and was once quite a trading-place.

**College City.**

Some eighteen miles south from the county seat, contains about 250 inhabitants, and is in a fine agricultural country. Some three miles east is

**Arbuckle.**

Located on the railroad, with a population of about 200.

**Jacinto.**

Is the shipping point for the large wheat farm of the late Dr. H. J. Glenn, and has one general store.

Sulphur creek is a small mining town in the Coast Range of mountains. Central is a city of the future. Spring valley, St. Johns, Nerrille, Butte City, Kanawah, and Leesville are all small trading points in various portions of the county.

**CONTRA COSTA COUNTY,**

Has an area of 344,491 acres. The Coast Range of mountains run parallel with the ocean across the county, extending in a south-easterly direction. The most distinguished feature of this range is Mount Diablo, standing out boldly 3,896 feet above the sea-level, its location being very near the center of the county. Its prominence caused it to be selected by the Government as the initial point of base and meridian lines in the survey for nearly two-thirds of the State's area. The immense coal fields of the Mount Diablo foot-hills are an important source of wealth to the county. These mines were discovered in 1859. The Black Diamond vein, for twenty years, has yielded its treasure to the never-tiring pick of the miner. Several railroads have been constructed from deepwater navigation, at the head of Suisun bay,

and are now being expended in reclaiming these lands, which became unproductively productive, the soil being a rich deposit of sediment and decomposed vegetation. Thousands of acres are leased to Chinamen and Italian gardeners, who pay an annual cash rental of from \$10 to \$20 per acre. The San Francisco vegetable market is largely supplied from these lands. As in most counties in our State, so here one may find a diversity in climate.

**Martinez.**

Situated on the Straits of Carquinez, is the county seat, and contains a population of about 700 people. The overland railroad now passes through the town, and the commerce of the Sacramento and San Joaquin rivers also passes in full view.

**Port Costa.**

A new and enterprising town, has advantages that few places in California possess, one of which is deep water, making the largest sea-going vessels to come in and load with wheat, as well as the largest grain warehouses on the coast. The town has over 3,000 feet of wharfage for shipping facilities. The monster ferryboat "Solano," 125 feet in length, with four trucks, is capable of conveying four trains of cars safely across the straits between Port Costa and Benicia, a distance of one mile.

**Antioch.**

Has a population of 900, and is situated on the bank of the San Joaquin river. The country around the town is all good agricultural land, some fine orchards being in the vicinity.

**Walnut Creek.**

One of the prettiest towns in the county we may say in the State—has a population of 590. The

and chrome mines. These iron ores have been tested by scientific men, who pronounce them of a very high grade. Coal was discovered, several years ago, four miles north from Crescent City. The country is but sparsely settled, there being only 2,500 people within her borders.

**Crescent City.**

The county seat, with a population of 1,000, is situated on a small bay, looking southwest, and facing the sea, at the foot of the Coast Range of mountains. Nearly all of the exports and imports of the county are from Crescent City; in fact, there is an extensive country tributary to this point, reaching north into Jose phine and Jackson counties, Oregon. The climate of that portion of the county, near the sea coast, comprising Crescent City, Elk and Smith river valleys is, in its general character, mild and healthy. Severe frosts are seldom experienced. The heat in summer is not oppressive and, although little or no rain falls in the summer months, the close proximity to the ocean lends moisture enough to the atmosphere to sustain the vigorous growth of plants. The immense fern and weeds, in the redwood forests, indicate no lack of moisture. The rainfall at Crescent City is from 40 to 70 inches for the season.

**Del Norte.**

Sometimes called "Smith River Corners," is about sixteen miles northwest from Crescent City, and contains 200 inhabitants. There are only three villages in the county; the third is a mining camp, on the extreme east side of the county, called

**Happy Camp.**

The town is built on both sides of Indian creek, near its junction with the Klamath river, and sur



CITY OF OAKLAND, CALIFORNIA.

other towns in the county are Judsonville, Somersville, Danville, Adams, Lafayette, Pacheco, Pittsburg and various smaller places.

**DEL NORTE COUNTY.**

Situated in the northwest corner of California, has an ocean frontage of 32 miles, and extends east 42 miles, being nearly square, with an area of 860,000 miles. Its topography is a succession of mountain ranges, in the western and southern portions, which are well timbered with redwood, hemlock, spruce, cedar and pine, while in the eastern part the surface is broken and mountainous. The face of the country, in the western portion of the county, slopes toward the sea. The Klamath river enters midway on the eastern line, and flows southeasterly into Humboldt for 50 miles; it is the second largest river in the State. It was declared navigable, by the State Legislature, for a distance of 60 miles, to Orleans bar. The principal harbor is at Crescent City, which is located on a small bay, in latitude 41 degs. 11 min., longitude 120 degs. 19 min., and is 280 miles north of San Francisco, by water, and about the same distance south of the Columbia river. Vessels find good anchorage in five to seven fathoms of water. Two lines of steamers ply between here and San Francisco. There is an immense amount of Government land, both agricultural and mineral, in Del Norte county. No finer redwood timber can be found on the coast than is here, within a few miles of this harbor and within easy reach of the place. Gold mining has been steadily and successfully pursued since 1851. The most important gold mines in the county are at Happy Camp; they are mostly hydraulic diggings. The production of gold is from \$200,000 to \$300,000 annually. Immense deposits of iron ore, of various grades and classes, are found in different parts of the county, the bulk of which is in the vicinity of the copper

rounded by mountains, the only means of reaching the place being by mountain trails. The country around is rich in gold, and the town's chief support is in mining.

**EL DORADO COUNTY**

Has an area of 2,210,000 acres, and may be considered a mining county, although considerable farming, dairying and fruit-raising are carried on in the western portion, while the eastern portion is heavily timbered with pine, fir, oak and other mountain timber. Among the best developed mines are the Church, Union, the Placerville gold quartz, Mount Pleasant, Grand Victory, Rosokrans and a number of others. Hydraulic mining has been extensively carried on in the vicinities of Placerville, Greenwood, Georgetown, Coloma and other portions of the county, besides the placer, sluice and scum diggings in other sections. Iron, copper, silver and slate are known to exist, the latter being worked to some extent. Farming is, as yet, in its infancy in this county, and there is a home demand for all the products. The dairy interest here is a large one, and is the most profitable. Those engaged in it are provided with two ranges: one in the lower foothills, for winter use, and the other on the eastern borders of the county for summer. The latter is at a high altitude, and is usually covered with snow until the first of May, when it disappears, and the most luxuriant food springs forth and keeps green all summer. The western and central portion of the county, the dividing line of snow and rain, is especially suited to the raising of fine fruits, such as pears, peaches, apples, plums and fine grapes, which are acknowledged to be superior in flavor to those raised in the valleys.

**Placerville.**

The county seat, one of the oldest and largest mountain towns, has, at present, a population of



about 2,500. Georgetown, Greenwood, Coloma and El Dorado are all old mining towns.

The county is well watered by the American river and its numerous tributaries. The system of canals, which supply water for banking, mining and irrigation, is unsurpassed by that of any other county in the State.

#### FRESNO COUNTY

Contains 5,500,000 acres, of which 4,000,000 acres may be classed as mountainous and pastoral land, and about 1,500,000 as agricultural and fruit lands. This county lies between the 36th and 37th degrees of latitude, and is very nearly the central part of California, extending northwesterly and southwesterly a distance of 120 miles, and its average breadth is something over 65 miles. The central portion of the county comprises a large part of the great San Joaquin valley; its lowest portion contains about 300,000 acres of marsh and low lands, formed by the waters of King's river, which, during high water, are partly covered with the mingled waters of King's and San Joaquin rivers. The eastern two-fifths of the county is mountainous, comprising the highest portion of the Sierra range, and the most elevated mountain region in the United States, extending from Mount Lyell, on the north, to Mount Tyndall, on the south, a distance, along the range, of over 100 miles. Within this region rises the Fresno, San Joaquin and King's rivers, and the perpetual banks of snow and ice. Fresno contains 40 living glaciers, some of these, lying under the crest of the Palisades, left about two miles in length; and, also, many of the best vest peaks in America are found here. Mount Goddard, King, Gardner and Tyndall are upwards of 14,000 feet above sea level, while a large number of other peaks approach very nearly that height. There is no pass over the summit less than 9,000 feet above sea level. On the westerly slopes of these ranges are found some of the heaviest bodies of timber in the State, and in some localities grows the big tree, or *sequoia gigantea*.

are nearly all in the vicinity of Fresno City, the oldest, the Central California, has about 50 families. Immediately adjoining it lies the Washington Irrigating Colony, which embraces eleven square miles. This is laid out into twenty-acre tracts. The land is usually level, inclining towards the west. The soil is a rich, sandy loam. Here is now a population of about 350 people. Between the first-named colony and the city of Fresno lies the Fresno Colony, which, like its predecessors has been subdivided into twenty-acre tracts. About three miles northeast of Fresno we come to the Scandinavian Home Colony, consisting of 1,925 acres, which is divided into 95 lots of twenty acres each. With each lot is sold a perpetual water right for purposes of irrigation.

#### Selma

Has a population of 500. The country is nearly level, and the Centerville and Kingsburg canal passes through the outskirts of the town. About six miles south of Selma the third largest town.

#### Kingsburg

Is reached, which is situated a short distance from King's river, on the line of the Southern Pacific Railroad. This place contains about 400 inhabitants, and is located in a fine agricultural country, level as a floor.

#### Madern

Is situated 23 miles northwest from Fresno. It is at this point where tourists leave the train and take the stage for Yosemite valley. The other towns in the county are Centerville, Buchanan and Toll House. The entire population of Fresno county is 12,000.

#### HUMBOLDT COUNTY

Contains an area of 2,211,840 acres, being three times as large as the State of Rhode Island. Its length from north to south is 168 miles, and its greatest breadth is 48 miles. There are no large valleys, it consists of rounded ridges, with prairies on top, and wooded sides and small valleys between. No spot more fertile, of equal extent, was ever favored with such wealth in forest, so

and Arcata, there are thousands of acres of swamp and overgrown lands; from Eureka, south, are what is known as the Hookton bays. There is another large tract of land, from the island to Mad river and the marsh south of Eureka, to Humboldt point and still further south to the mouth of Red river, and all of which would be easy to reclaim. The value of these lands, when once reclaimed, would be incalculable.

#### Eureka

The county seat, has at present a population of 5,000 people, and is the most important place in the county. It is located on the eastern shore of Humboldt bay, about midway between the entrance and the northern end of the bay, and is the principal shipping point of the county. Several lines of steamers ply between this point and San Francisco, besides, vessels from all parts of the world come in here for the excellent redwood lumber manufactured here. A daily line of stages also runs from Eureka to San Francisco, a distance of 215 miles. Eureka also has several local lines of railroad, principally for transporting lumber and logs from the interior to tide water. Considerable ship building is carried on here by its separate yards, this being an eligible location, as the material for ship building is to be had in abundance.

#### Arcata

Is connected with Eureka by steamer across the bay, a distance of some seven miles, and by a wagon road, a distance of twelve miles. It has a population of about 1,000. The fine agricultural and fruit lands that surround Arcata are of wonderful fertility, possessing a soil that is literally inexhaustible. It has vast redwood forests in the background, that generations will not exhaust.

#### Fernside

Has a population of 785 people. It is connected by daily stage with Eureka, and is located some eighteen miles south.

#### Klamathville

Has a population of 140 people. The town is situated

posse the headwaters of the San Joaquin, and flowing thence a distance of 150 miles south, where it is lost in Owen's lake. This valley is about 75 miles long, and from two to five miles wide. The principal farming is within this basin, and, however, in the valley of the river proper, but in the numerous small mountain streams flowing down from the Sierras on the west, from which the waters are derived for irrigation, producing wheat, barley, oats, corn and fruits—principally peaches and grapes. Whatever the farmer produces finds ready sale, at good prices, in the immediate mining districts of Inyo, and across the line in Nevada. One of the richest mines on the Coast, known as the Union Consolidated, of the Corro Gordo district, which lies in the Inyo mountains, forming the eastern boundary of Owens valley, has already yielded over \$10,000,000. In the same district are other noted mines, such as Ygnacio, San Lucas, and Palmer. To the south of Corro Gordo are Darwin, Lochmont and Puniment. The Keasage series of mines, the Rex Montes, and other independent localities are situated in the Keasage peak, directly west of the town of

#### Independence

The county seat, situated on the western side of Owen's river valley, with a population of 350 people. In 1890 the whole county had a white population of only 2,838.

The mineral resources of Inyo county are not yet prospected. If railroads should ever lap this county, which, no doubt, they soon will, this sparsely settled county, with her mountains of silver, her mineral beds of borax, and her ledges of gold quartz will teem with industries which, at present, are scarcely thought of. The area of the county is 6,500,000 acres.



NAPA CITY, NAPA COUNTY, CALIFORNIA.

tea, in which some single trees are found measuring 120 feet in circumference. Of the 9,500 square miles of mountains in Fresno county at least four-fifths are in the Sierras.

Gold-bearing quartz has been found throughout the range. Generally, when the range is broken by seams of slate, the several mines, opened and being opened, promise well. Likewise, veins of copper have been found, and one or more of them worked. The higher, or timber range, is less broken than the foothills, though the ravines are deeper and the geological formations more varied. The soil, generally, is darker and richer. Small meadows and marshes are numerous, and water is found in every ravine. North of the San Joaquin is an elevated, comparatively level, timbered plateau, reaching back well toward the summit, over which a railroad line has been surveyed, designed to become part of an Eastern route. Between the San Joaquin and King's rivers the country is more broken, the evidences of both volcanic and glacial action more abundant, and the varieties of rocks and minerals more numerous.

Fresno county has 2,022,800 acres, a little over one-third of its total area, lying in what is known as the great San Joaquin valley. This valley, extending from the Sacramento river north to Fort Tejon, has a length of about 250 miles, and an average breadth of about 60. The valley portion of Fresno county occupies a section about 60 miles square. Several distinct regions are formed, distinct in soil, climate, and character of water and the general facilities for irrigation and cultivation. The territory of the east side is about twice the area of the west. Fresno county affords almost every variety of soil, and a dozen varieties may be often found within an area of two miles square.

#### Fresno City

On the first of May, 1872, the railroad company formally located the town, which is situated near the geographical center of the county, on the line of the S. F. R. R. It lies 195 miles southwest from San Francisco. This bustling little city now has 2,000 inhabitants, and, in the annual of business done and general thrift, she rivals many of the towns of California of double her age and population. The columns of Fresno county

are accessible to the world's highway, as Humboldt. The largest area of level land is in the vicinity of Humboldt bay, on the western line, about midway between the north and south line. The area of the bay is from 30 to 40 square miles, a portion of which is very shallow tide water. The expanse of the sea is at the south end. One-third of this county is as yet unsurveyed, and there are only 15,345 people within its borders; the unassessed lands amount to 1,483,160 acres. Of this there is not more than perhaps one-tenth that might be called waste land. The balance of the unsurveyed lands are what might be called grazing lands, the most of it being covered with an inferior growth of stunted timber, while some of it may come under the head of mineral lands, which are located in the north end of the county, and consist of gold, silver and quartz ledges. Some copper ledges have been discovered in the southern portion. Coal is also known to exist in portions of the county. The agricultural lands that are being farmed are but a small portion of what might be utilized, and which no doubt will be when it becomes more settled. The lumbering interest exceeds all other industries in the county. The average of redwood timber within its borders are about 96 miles in length, and will average twelve miles in width, amounting to about 750,280 acres; this timber will furnish from 50,000 to 100,000 feet to the acre. There are some localities that will produce 1,000,000 feet to the acre. The number of feet of standing redwood is variously estimated by well-informed men, and the figures given are from 70 to 100,000,000,000 feet. Humboldt is one of the best watered counties in California.

There are some rich gold deposits in the county. Orleans bar, in the north east corner, has long been known as a rich placer field. At Gold Bluff, on the northwest side, are the black sand beach mines that have been worked for twenty years, with good results. Placer mining has taken a new start, and a large amount of capital is being invested. There is little or no speculation in this industry, for, with capital and good judgment, the returns are as sure as any other legitimate enterprise.

The low lands of Humboldt county are worthy of note, although little attention has been paid to them yet. In the vicinity of Humboldt bay, between Eureka

and Arcata, there are thousands of acres of swamp and overgrown lands; from Eureka, south, are what is known as the Hookton bays. There is another large tract of land, from the island to Mad river and the marsh south of Eureka, to Humboldt point and still further south to the mouth of Red river, and all of which would be easy to reclaim. The value of these lands, when once reclaimed, would be incalculable.

#### Hydaxville

Has a population of 300 people. It is situated on high table land nearly 300 feet above the level of Red river valley; it has a fine farming country to back it.

#### Treadwell

Lies northwest from Eureka, a distance of 37 miles; it is on the ocean; a fine harbor is here, and Government light-house. The other towns are Table Bluff, Hookton, Petrolle, Bixburg, Garberville and Springville, nearly all supported by the lumbering interests of the county.

#### INYO COUNTY

Lies east of the Sierras, the summit of which forms its western boundary. It is almost as much isolated from San Francisco as though it belonged to some other State. This is a country where extremes meet; a country of startling contrasts, such as are to be found nowhere else on the continent; a country of rugged and giant peaks, among which are Mount Whitney, Tyndall, Brewer, and others of the Sierras, the most elevated portions of the American continent, with chains such as to render an ascent to their summits, from their eastern slopes, almost an impossibility; a country where, to the eastward of these, pointing heavenward, the earth's surface sinks hundreds of feet beneath the level of the sea, (Death valley, which is elsewhere desiccated); a country of beautiful and fertile plains and, at the same time, of forbidding wastes; a country of almost Arctic frosts and perpetual snows, and torrid, scorching heat. Its principal, and almost only valley capable of settlement for agricultural purposes, is the valley of Owen's river, which takes its water from the Sierras, nearly op-

#### KERN COUNTY

The valley portion, although covering nearly 1,000,000 acres, is but a small portion of the county, as the culture area is 5,137,920 acres. The topography of the county is exceedingly diversified. Kern River heads in the mountains fastnesses of Tulare county, and breaks through the granite hills, down a deep precipitous gorge, descending many thousand feet in a few miles, and rolling out upon the plains. As it reaches the valley it spreads into devious channels, making a large Delta, which is called Kern Island. So conspicuous is the stream that a slight impediment made it fly of on a tangent, a few years ago, cutting a new channel, whose mouth was 55 miles from that of its original bed. Kern and Buena Vista lakes receive the water of the river, and, in turn, discharge it into Tulare lake. Some of the most productive farms in all California have been made on Kern island, within the past few years, where naught but grass and sage brush formerly grew. This has been accomplished, by means of a liberal expenditure of capital in the construction of irrigating canals, which now ramify all parts of the island. Without irrigation very little would be produced in Kern county. An ample supply of water is furnished by Kern River, which has a drainage area of 2,382 square miles. The average run-off of the valley rarely exceeds three or four inches, which is insufficient to mature any kind of crops. There are a number of large ranches under cultivation and irrigation, the largest being those of Messrs. Haggin & Carr. The present development of the agricultural interests of Kern county is so largely due to the enterprise of the San Francisco capitalists, that, without them, this county would still be in a comparatively wild condition.

#### Bakersfield

The county seat, is situated in a grove of large cotton



ion wood, sycamore and willow trees, on the sandy bottom, adjacent to Kern river, and about one mile west of the Southern Pacific Railroad. It has a population of about 1,000. The second largest town in the county is Sumner, the railroad station for Bakersfield, and claims a population of 200 inhabitants.

Tehachapi is at the summit of Tehachapi pass, on the railroad, and has considerable interests in lumber, wool and marble, of which a rare variety has recently been found.

Mojave, 370 miles south from San Francisco, is in the great Mojave desert, on the eastern side of the mountains. Stages leave this point for Independence, Inyo county, 150 miles distant.

#### LAKE COUNTY.

Some 75 miles due north from San Francisco, is one of the smaller counties of California, having an area of 624,000 acres of surface. At present it is somewhat isolated, as there are no railroads touching it. Calistoga, the terminus of the Napa branch of the California Pacific, is some twelve miles from the south line of the county, and Cloverdale, the terminus of the San Francisco & North Pacific, is fifteen miles from the west line of the county. The general topography is rolling and hilly. Located to the Coast Range of mountains, Mount St. John, highest point in the county, is situated in the extreme north end, some 4,000 feet above sea-level. Clear lake, which lies nearly in the middle of the county, forms one of its principal features; this lake is about 22 miles in length, with an average of from three to six miles wide, lying from north-west to south-west. The Blue lakes, three in number, are surrounded by some of the finest scenery in the county. Cuckoo creek, clear and sparkling, is the outlet of Clear lake. Putah and St. Helena creeks

and is beautifully and picturesquely situated. About seven miles southwest, is

#### Kelseyville.

In Big valley, one of the finest agricultural sections in this county. This place contains about 600 inhabitants.

#### Lower Lake.

Is a place of considerable trade, it being the market-place for the Sulphur Bank mine, in the immediate vicinity. Here are also several productive, fine valleys. The town now contains about 700 inhabitants, and is quite a business place.

#### Upper Lake.

About one mile from the upper or northern portion of Clear lake, contains about 350 people. In the extreme south end of the county, is the village of

#### Madisonville.

A place of some 400 inhabitants, in the vicinity of which are located several of the quicksilver mines. What Lake county most needs is railroad communication with other parts of the State, then this favored district, with its invigorating climate, beautiful scenery, forests of timber, mineral springs, her extensive lime deposits, pastures that afford grazing for hundreds of thousands of sheep, sunny hill sides, the natural home of the grape, fine fruit and vegetable lands, lands that are cheap, will become known. The census of 1890 gave Lake a population of 6,127, which, at present, may be 6,500.

#### LASSSEN COUNTY.

Has an area of 3,040,000 acres, and is very irregular in shape, being about 103 miles in length, from north to south, and 50 miles in width. This county is a succession of mountain ranges and valleys, and has a general trend to the south-east and north-

west. Twenty-five miles from Susanville, on the Reno road, and in the lower end of Honey lake valley, has about 300 inhabitants. Opposite the town, and across the lake, which is about ten miles wide, there is an extensive stretch of hay country. In the immediate vicinity of the town are as fine orchards as can be found in the State. The climate here is peculiarly adapted to the raising of fine apples, pears, peaches, plums, grapes and other fruits.

#### James Hill.

Midway between Susanville and Milford, has about 350 inhabitants. A few miles away, and within the same voting precinct, is the small town of Buntingville, surrounded by some of the finest farming lands in the county.

#### Johnstonville.

Eight miles further up the valley, on Susan river, has a population of 300.

#### Heber.

A small town in Big valley, near Adin in Modoc county, and about 25 miles from Hayden hill, has several hundred inhabitants. It is a depot of supplies for the mines of Hayden hill; these mines consist of a decomposed quartz, which are proving to be very rich. The mines at Mountain Meadows, on the divide between Plumas and Lassen counties, are said to pay well.

Lassen county should have a prosperous future, as it has at least a million acres of fertile land susceptible of cultivation. At present, it has only about 3,500 inhabitants, the greater portion of which are scattered on the farms in the various valleys.

#### LOS ANGELES COUNTY.

Is the most southerly county in the State, save that

and as devoid of vegetation as a barn floor. At present there are orange orchards bending beneath the weight of fruit, bearing vines of every variety, also every variety of southern fruit, such as apples, pears, peaches, etc. The agricultural products are corn, barley, rye, beans, potatoes, onions, hops, flax, etc. The other towns in the southern portion of the county are Westminster, Garden Grove, Tustin City, San Juan Capistrano, and Norwalk.

#### Westminster.

Six miles west of Anaheim, is a thriving place, and is noted for the number of its artesian wells—about 400. Garden Grove, about three miles from Westminster, is surrounded by land that produces immense crops of corn. Tustin city is situated two miles east of Santa Ana. Orange is a pretty place, and very aptly named; orange groves cluster thickly all around the settlement. San Juan Capistrano, 33 miles south from Santa Ana, is famous chiefly for the possession of a picturesque old Mission, built in 1776. The celebrated Black Star coal mine is twelve miles east of Anaheim. By keeping in the neighboring mountains is quite an industry. The canyons are crowded with bee ranches, producing large quantities of honey.

From Los Angeles east via the Southern Pacific Railroad, a short distance, brings us to San Gabriel valley, one of the finest sections in the county. A few miles from the railroad in Pasadena. From here southwest to the Santa Ana Ranch in the east, a distance of fifteen miles, the country has become almost an unbroken vineyard and orange orchard. To attempt its description would occupy too much space. Some five miles east brings us to the villages of Savanah and Lexington, the business centers of El Monte settlement. Downie City and Gospel Swamp are noted for the best corn-producing in California. Still further east takes us into



SANTA ROSA, SONOMA COUNTY, CALIFORNIA.

head in the southern portion of the county. Middle and Clear creeks, two beautiful little streams, empty into Clear lake. One branch of Cache creek heads up in the northern portion of the county, and has a course of some 25 miles within its borders. There are numerous other small mountain streams.

Lake county abounds with mineral springs, the waters of which possess great medical virtues. Bartlett's, Highland, Harbin's, Pearson's, Seigle's and Anderson's are the best known abroad, but there are a dozen others whose waters are very fine, and which will become famous in time. The agricultural portions of the county are Clear lake valley, Big and Long valleys, on either side of the lake, and Scott's, Cobb, Cayne, Lower Lake, and Morgan constitute the principal valleys of the county. They embrace, in all, from 80,000 to 120,000 acres, comprising the very best land for wheat, barley, oats, potatoes, and vegetables of all kinds. These valleys are well watered, and there is never any occasion to call upon artificial means to insure good crops. Farms generally do not exceed 300 acres in extent. The hills that surround the valleys are composed of the best soil for grapes, and experiments have been tried, the vines have proved very hardy, productive, and remunerative. Fruit of all kinds, such as apples, pears, plums, apricots, peaches, and prunes do remarkably well; most of the orchards are young, and just coming into bearing. Sheep-raising is one of the principal industries of the county, as the extensive range afforded by the mountains and foot-hills make it a profitable business. Several extensive quicksilver mines are now being worked. On the east side of Clear lake is Borax lake, where that mineral is found in its mud.

#### Lakeport.

The county seat, contains about 1,200 inhabitants,

west, interspersed with numerous beautiful lakes, the largest, located in the south end of the county, is called Honey lake, and is situated in a beautiful valley of the same name; this valley is 45 miles in length, with an average width of ten to fifteen miles, and embraces the principal farming land under present cultivation. Long valley lies in the extreme south-east of the county. In the extreme north-west corner, and extending into Modoc county, lies Big valley, a large stretch of agricultural land, containing, in Lassen county, about 75,000 acres, which is well watered by Pitt river, Ash creek and a number of smaller streams. Between Big and Honey lake valleys lie Grasshopper, Willow creek, Eagle lake and Horse lake valleys, separated from each other from the main valleys by intervening ridges of various heights. In the eastern central part lie the Madeline plains, a large level tract of land, at an altitude of 5,200 feet. It is about 35 by 15 miles in extent, and, at present, is nearly covered by a dense growth of sage brush. The only natural source of irrigation appears to be the springs about its edge, where there are excellent stock ranges, the surrounding hills being covered with bunch grass, affording abundant feed. The average altitude of the valley lands are 4,000 feet and over. The soil is generally fertile.

The timber belt of the Sierras extends into the western portion of the county until they fall below the timber belt. This timber, consisting of pine (yellow and sugar), spruce and fir, will in time, when the railroad reaches the county, be valuable.

#### Susanville.

The county seat, has a population of 600. The United States Land Office, for the northern district of California, is located here, which adds considerably to the importance of the place. Stages connect (daily) this place with Reno, Nevada, also to Alturas, Modoc county, and a tri-weekly to Oroville, Butte county.

of San Diego. Its entire southwestern line borders on the ocean. It has an area of mountains running diagonally through the county from a northwesterly to a southeasterly direction, dividing the county into two equal parts. The most productive portion lies in the southern part of the county. In the mountainous portion of the county are numerous valleys, each one being different in climate, as well as many different qualities of soil. The city of Los Angeles, which is the largest city on the coast south of San Francisco, is a great railroad center for all southern California.

#### Los Angeles City.

Has about 16,000 inhabitants. It is surrounded with one of the finest fruit sections in all California—principally semi-tropical, such as oranges, lemons, limes, raisin grapes, olives, etc. The city contains many handsome public and private buildings. As Los Angeles is a great railroad center, it contains many large wholesale houses which have an extensive trade throughout southern California, Arizona and New Mexico.

#### Santa Ana.

Has a population of 2,000. It will, no doubt, some day in the near future, become an interior city of importance, and is situated in a thickly settled country. Between Los Angeles and Santa Ana is

#### Anaheim.

Settled by the oldest and most noted colony in the history of the State. The whole colony is subdivided into 20-acre farms and upwards, and for the cultivation of the orange, lemon and lime, the land about here is unsurpassed. The settlers are principally Germans, who cultivate every foot of land, and it is really astonishing to see what a few years of well directed energy will accomplish in this wonderful country. A few years ago, before water was introduced on to this land, it was a barren plain,

San Jose valley, watered by San Jose creek; this is also a fine agricultural section. The next station east is Pomona, the eastern limit of the county, which is quite a large village, and is growing rapidly. There are many other valleys and settlements peculiar to themselves, which we can not mention for want of space. Los Angeles had a white population, in 1880, of 33,379, which was largely increased within the past two years, and at the present writing, it has no less than 40,000. Taking into consideration the diversified soil, valleys, foot hills, elevated plains and fine, genial climate, we must say Los Angeles has a bright future.

#### MARIN COUNTY.

Has an area of 367,166 acres of surface; 311,439 acres of this is upland, while 12,073 acres is swamp and overflowed lands about the bays and estuaries and 12,790 acres is tide land, which will, some day, be leveled in and become very valuable. The surface of the county is mostly broken and hilly, and a great deal of it is composed of high and sharp rugged hills, which, to several instances, attain elevations sufficient to settle them to be denominated mountains. Notwithstanding its hilly nature the land is very valuable. The prevailing winds of summer come from the sea and pour upon the hills and valleys, in the western and southern parts of the county, a constant stream of moisture, in the shape of fog, which keeps the grass green throughout the year, and is now occupied by the most skillful dairymen in the State. The population of the county, in 1880, was 11,367, besides the inevitable Chinese, numbering about 1,500, who are largely engaged in the fisheries along the shores of the bays.

The highest elevation in the county is Mount Tamalpais, which is 2,688 feet above the level of the sea, and, from its peak (which is easy of ascent and only five to six to eight miles from San Rafael, the county seat) on a clear day, may be had the finest view of the Golden



Gate, the broad waters of the Pacific, the entire surface of San Francisco bay, hushed night or ten times, fills and villages around this, one of the finest harbors of the known world.

#### San Rafael.

The climate is unequalled for health, and is the home of many San Francisco business men. Many thousands of people, during summer months, resort to the vicinity for pleasures.

#### Sausalito.

Six miles from San Francisco, is connected by ferry, making four trips per day. It is built on the base, and on the slope of steep hills, and is the principal depot for the N. P. C. R. R. San Quentin is twelve miles from San Francisco, and is connected by ferry, the N. P. C. R. R. and the F. & N. P. R. R.

#### Tombles.

Fifty-five miles from San Francisco on the N. P. C. R. R., is the center of the principal farming and dairying country of the county, and contains about 400 inhabitants. Napa, Sonoma and Olema are small stations along the railroad. Bolinas, on a bay of the same name, near the coast, communicates with San Francisco by sailing vessels. The bracing climate, clear living and fine scenery make Marin a desirable place for city people to spend their summer vacation.

### MARIPOSA COUNTY.

Has an area of 988,000 acres, the greater portion of which is mountainous and hilly, and is remarkable for containing the largest number of gold-bearing quartz veins in the State. The topographical features strongly resemble El Dorado, Amador and Calaveras, as it occupies nearly the same position on the western slope of the Sierras; its eastern portion is above the snow line and its western border extending into the great San Joaquin valley. Mariposa is one of the best timbered counties along the western slope of the Sierras, which consists of excellent saw timber, such as several species of pine, spruce, fir and *Sequoia* or big tree timber.

This is, strictly speaking, a mining region—principally gold. There are probably more gold-bearing quartz veins than are to be found in any other territory of similar size in the State. A large portion of it is not yet prospected. Twenty-six quartz mills are within the limits of the county. The placer mines have been famously rich in coarse gold, and the precious metal taken from the Mariposa mines would figure up in the millions. Some of the principal mines in the county are the Washington, near Hornitos; the Ferguson, on Merced river; Maxwell, Mary Harless, Malvin, Potosi, Marlio Spring, Martin, Walling, Virginia, Benson, Blaine and Crown Laid, all in the vicinity of Conterville. The Ritter's Cove is one of the best paying in the county. Bull Creek is a section of the mining country, about eighteen miles above Conterville, and includes quite a number of gold-bearing quartz veins, which, as a whole, are known to be rich in gold, and are likely to be worked in time. The Georgia Potol, and a number of others, do not now recover, but are valuable—were worked to some extent.

The soil, in the valley portion of the county, is usually fertile, and adapted to limited farming, especially where water can be had for irrigation—principally fruit, vegetables and grasses. Fruit and grapes raised here, in the small valleys in mountainous places, have a peculiarly fine flavor. Sheep raising in quite an industry in this county.

#### Towns.

Mariposa, the county seat, contains about 70 people. Hornitos—an old mining town, on the stage road between Merced (on the S. F. R.) and Mariposa, and about twenty miles from the latter place—is situated in a fine mining country. While the neighborhood is dotted with quartz, a number of small ranches, farms and gardens raise a sufficiency of cattle, hogs, barley, hay, vegetables, etc., for home consumption. Conterville is also a mining town, situated about 25 miles from Mariposa, on the Merced river. Though surrounded by a vast quartz region, it is not without a number of small farms, orchards and gardens. The county contained, in 1880, a population of 4,389, but, according to the present writing, to 4,500. The climate, especially during the summer months, is salubrious, and the scenery grand and picturesque, vouchered for by thousands of tourists, from all parts of the world, who visit the famed Yosemite annually.

### MENDOCINO COUNTY.

Has an area of 2,280,000 acres, and the surface of its territory is quite mountainous and broken, the Coast Range occupying its entire extent, some of the highest peaks reaching 4,000 feet. Mendocino is one of the best watered counties in the State. The Russian river flows through the southern part of the county, forming quite an extended valley within its borders. Ed river waters very valuable agricultural lands, including Eden valley. Besides these, there are the Navarro, Washita, Albion, Napa, Rio Grand, Garcia, Ten Mile and Little rivers, with Salmon, Greenwood, Pudding, Alder and Brush creeks, all good-sized streams. The great wealth of this county is in its redwood timber, of which it has an inexhaustible supply. This redwood timber belt extends all along the coast, reaching back from eight to ten miles, and in some instances along the streams farther into the interior. A number of the streams, flowing into the ocean, afford very good harbors, at the mouths, for steamers and sailing vessels during a greater part of the year. Among the most prominent points upon the coast are Point Arena and Point Cabrillo, while the most important timber, which in some cases are beautiful sheets of white, and nearly all affording safe and commodious shipping points to the coasting trade, are Shelter cove, Coffey's cove and Ferguson's cove. An immense amount of lumber is shipped from these points annually. Some of the largest saw mills on the coast are located in this timber belt, and no less than six different local railroads are in operation, engaged in the lumber trade. Twenty-four saw mills are in operation along the coast, with capacities to cut from 1,000 to 75,000 feet daily. Growing as to agriculture is most excellent, and many of the numerous valleys, along the water-courses, are among the most fertile spots in the State, producing large amounts of corn, wheat, potatoes, hay and vegetables. A great portion of the county is yet Government land. The S. F. & N. P. R. R., from San Francisco to Cloverdale, within a short distance of its southern end, fur-

nishes communication for the Russian river valley, and stages run daily from the latter place to Ukiah.

#### Ukiah.

The principal town and county seat, situated in Russian river valley in the agricultural country, it takes from the terminus of the railroad. It has a population of 1,200.

#### Mendocino City.

Located on the coast, 55 miles northwest from Ukiah, has 900 people, largely interested in the lumber trade.

#### Point Arena.

Is a town of 500 inhabitants, and is situated on the coast. There are a large number of small towns in the county, namely: Napa, Fort, 500 inhabitants; Casper, 500; Willet, 400; Covela, 300; Coffey's cove, 350; Albion 200; Gualala, 400; Kibalah, 200; Hopland, 100; Calappa, 100; Calbo, 50; Pomo, 50; Centerville, 75; Bonville, 50; Little River, 100; a number of smaller places, viz: Arc, Anderson, Big river, Bridgeport, Big Rock, Buchanan, Boat's Landing, Blue Rock, Christie, Comanche, Carroll, Casper, Cottondale, Ed river, Galloway, Garcia, Hot Springs, Lima, Long valley, Manchester, Oriental, Potter valley, Sherwood, Sanal, Willow and Yerville. The population of the whole county, at this time, is fully 15,000, and is fast swelling up, as there is a large amount of cheap land, and the capabilities of the county are sufficient to support ten times its present population.

### MERCED COUNTY.

Has an area of 1,155,336 acres, embracing the whole width of the San Joaquin valley. The population for 1880 was 6,500, which may have reached 6,000 at the present time. Fully three-fourths of the land is susceptible to cultivation, the remainder being suitable only for grazing. In seasons of abundant rainfall excellent crops are matured, the yield of wheat, in some places, being specially adapted to its growth, being frequently as high as bushels to the acre. The general failure of crops, in a season of little rainfall, points forcibly to the necessity of providing a thorough system of irrigation, and it is gratifying to note that the lessons of the past, in this regard, are not unheeded, as the farmers have organized various irrigating enterprises on a large scale. The geological formation of the country is such that flowing water, from artesian wells, may be obtained at a depth of from 250 to 300 feet. Numerous wells have recently been successfully bored

and water power capable of running a vast amount of machinery.

#### Mercer City.

Is surrounded by a body of fine farming land, and is centrally located. In addition to the trade of the valley, it commands a large mountain trade from Mariposa county. Mercer has at present, a population of 1,700. The second largest town in the county is

#### Shelling.

Situated on the Sherton and Mariposa wagon road, six miles from Mercer, with a population of 150. The other towns in the county are

#### Phatsoburg.

A railroad shipping point ten miles south of Mercer, which has large grain warehouses and about 100 inhabitants. Alhona, also a railroad station, with perhaps 50 inhabitants. Cresco station, a grain shipping point, on the railroad, Alwater, six miles north of Mercer, is a grain shipping point; Los Banos, a Spanish town on the west of the San Joaquin river, contains a population of 100 people. Central Point and Hopland.

### MODOC COUNTY.

In the northeast corner of California, lies an area of 2,700,000 acres, and is known as high table lands. Along its eastern border, lying between a range of mountains, we find a chain of link extending nearly across its entire width known as Upper, Middle, and Lower lakes. These lakes are from two to four miles wide. About eighteen miles west from the northeast corner of the State is Goose lake, extending into Oregon. This lake is about 30 miles long from north to south, and some ten miles wide. In the northwest corner is Kettle lake, lying mostly in Siskiyou county. A few miles to the east is Clear lake, some three by five miles in extent. The entire county is a succession of hills, mountains and valleys, the Warner range in the eastern portion of the county being by far the most extensive. Between this range and the chain of lakes is a beautiful fertile valley watered by numerous streams. Considerable timber, such as pine, cedar, juniper, laurel, and the like, abounds in the neighboring mountains. The rock, abundant in the neighboring mountains. The head and Pitt Bidwell stage road leads through the valley, and the principal farming in the county at present is along the road. This county has been settled only some eighteen years, yet there are four moderate-sized towns in the valley. At the south end is Eagleville, situated in a fine farming section.

tallest of which are Mount Dana, 13,027 feet; Mount Lyell, 13,417 feet; Castle Peak, 13,000 feet, and many other of lower note, whose peaks are covered with perpetual snow. Owens and Walker rivers are the principal ones in the county. The former passes through the southern part of the county, and the latter through the northern part. Among the mountains in the northwestern part of the county, there are a number of small elevated valleys which constitute the principal agricultural, or cultivated lands of Modoc. The western part of the county is of an alkaline nature, with volcanic traces of a mineral character, almost entirely unproductive.

The mineral resources consist principally of gold and silver, but copper, zinc, iron, Jasper, and other minerals are known to exist. The development of a great number of silver veins has been carried on since 1867. The principal districts are Modoc, Castle Peak and Blind Springs, and mills and reduction works have been established in all. Gold and silver are found in equal quantities.

#### Bull.

The principal town in the county, is strictly a mining town. Its altitude is over 5,000 feet—higher than any other town in the United States. Considerable mining is carried on around Bodie. The climate is considered invigorating; considerable snow falls in winter, and the summers are always cool and delightful.

#### Bridgeport.

The county seat, is in an extensive valley, of fine agricultural lands, known as Big Meadows. Bridgeport contains several hundred inhabitants, who depend mainly upon the mining interests for support.

#### Benton.

Lies 70 miles southwest from Bridgeport; Mammoth City, in the southwest, is a town of nearly the same size; the lesser towns are Coleville, Dexter, Dogtown, Bishop's Creek, Monville, Montgomery, Oasin, Porterville, and Rockville. The census of 1880 gave Modoc a population of 7,493. In addition to the mineral resources of Modoc, there are large forests of timber, consisting of several species of pine, fir, tamarack, and other varieties of mountain timber. At present there are some 15,000 acres of land made productive by irrigation. The lumber, agriculture, and grazing industries, on the whole, are flourishing.

### MONTEREY COUNTY.

There is a great diversity of soil, climate and productions, owing to the peculiar manner in which the county is divided by mountains, hills and valleys. It is separated, naturally, into four sections, viz: The Santa Lucia range of mountains, running parallel with the ocean, in the western portion, following the coast line. The Gabilan range to the eastern portion extending from Monterey bay on the north into San Luis Obispo county on the south; these mountains are in most places very rough and steep, especially in the central and western portion of the range, so that some parts of the county have not been explored; they attain to a height of 5,000 feet. Between these two ranges lie the great Salinas valley, which occupies Monterey bay on the north, from which it extends in a southeasterly direction for 55 miles, and from six to fifteen miles wide, and contains 640,000 acres.

The lands in this valley may be divided into three classes. Rich bottom land, for the growth of anything; table lands, good for wheat and barley; those stand dry weather or a short supply of rain better than any other in the county where the farmer can ship produce, either by rail or by water. Monterey is located at the mouth of Salinas river where it enters Monterey bay. There are six steam points in the county where the farmer can ship produce, either by rail or by water. Monterey is situated in a cove on the northern extremity of Monterey bay and is thoroughly protected from the rough winds of the Pacific by the range of mountains which extend about three miles to the northward and terminate at Point Pinos. The harbor is one of the best on the coast, and is free from ice in winter. Monterey is chiefly connected with the early history of California. But the greatest attraction in all this modern place is the Hotel del Monte and Casino, the most luxurious and comfortable hotel in the country. It is built on a hill, and is a masterpiece of architecture. It is in the plan of exterior, while its interior finish, accommodations, and appointments are much superior to those of any like establishment in the United States. It is built in modern style, and is 100 feet in length, and 115 in width, the outer being five stories high, with a tower 80 feet; 100 more rooms were added this season. There are three flights of stairs; one at the intersection of each of the main wings, and a grand staircase leading from the lobby. The hotel is lighted throughout with gas; pure water is supplied from an artesian well. At a short distance from the hotel are the carriage houses and stables large enough to accom-



HOTEL DEL MONTE, MONTEREY, CAL.

#### Cedarville.

Has some 350 people, and is in a flourishing condition. Ten miles to the north, on a stage road, is Lake City, situated on Mill creek, surrounded by a long stretch of meadow land, and very productive. Sixteen miles farther north at the head of the valley is Fort Bidwell, which has several hundred inhabitants. All the goods and merchandise for the valley are hauled by team from Reno, Nevada, a distance of 175 miles.

#### Alturas.

The county seat, is situated near the eastern end of Hot Spring valley. This valley takes its name from a large hot spring which throws up the water five or six feet high. The valley is about fifteen miles in length, by six in width, and is watered by several branches of Pitt river (one of the largest tributaries of the Sacramento), nulling at Alturas, presenting a fine location for the town, which has a population of 500 people. It is 480 miles north from San Francisco. The country is owned by the lava beds, embraces a large portion of the northern western corner of the county. It is a succession of gulches and crevices which range from a few feet to 100 feet in width; some have intermittent passages which are watered by Pitt river and its branches. This singular country extends eastward to Goose lake, which has no arable lands, and is fit only for grazing.

Big valley, situated in the southwest corner of Modoc, is some 25 miles in length, and nearly as wide. It is watered by Pitt river and its numerous creeks. The soil of this valley is as variable as is the formation of the county itself. The valley has only been settled some ten years. The village of Adin, which now has 400 people, is located on Ash creek near the eastern side of the valley. Goose Lake valley, lying on the eastern side of the lake, is a fertile and well-watered country, surrounded by fine bodies of timber, principally cedar and pine. Surplus water is divided from Goose lake and Hot Spring valley by the Warner range, the valley extending north and south for nearly 100 miles, and being from six to twelve miles wide. There are a large number of small valleys throughout the county with fields of good government, agricultural and timber land. Modoc county had a white population, in 1880, of 4,383; but would number 5,000 at present. This is considered one of the best stock-raising countries on the coast.

### MONO COUNTY.

Has an area of 1,740,000 acres. The western portion lies among the tall peaks of the Sierras, some of the



moderate horses. The grounds contain one hundred and sixty acres of a beautifully wooded, natural park of pine, oak, cedar, and cypress trees; there are thousands of young trees planted. Fine grass plots, swamps, and a small lake are scattered throughout the park. On every hand, beautiful drives all through the park, and about half a mile west on a gradual descent at the beach are the magnificent bath houses. A more perfect and desirable bathing place would be hard to find. Here was recently completed the largest bathing establishment of the kind in the United States at a cost of \$200,000, with large hot, cold, plunges, salt, and fresh water baths, and ample accommodations in the bath-houses for 200 bathers. Between the hotel and the ocean is a fine beach of sand, and the natural park can be found in the State; fine drives along the bay and ocean, among the thickly wooded and rocky cliffs are being made. A drive to the lighthouse and through the quaint town of Monterey will supply a journey to this one of California's historical spots. Monterey is one of the most beautiful cities in the world. The distance by rail from San Francisco is 125 miles; steamers, 85 miles; present population of the town, 2,000.

#### NAPA COUNTY

Is justly famous for her productive soil, fine healthful climate, which is pleasant the year round—the summers being cool and agreeable, and the winters mild and unobtrusive. It is an area of 465,000 acres. The topography of this county is a succession of low mountain ranges and valleys, with a general northeast and southern direction. The principal valley is known as Napa valley, and extends through the entire length of the county, beginning at Suisun bay on the northern line, in a northwestern direction to above Calistoga. This fine fertile valley is some 50 miles in length, and from two to eight miles in width; it embraces about 66,000 acres. The soil of Napa valley is usually a dark gravelly loam, very fertile and, during early seasons, is not usually irrigated. The lands in this valley are all cut up into small tracts, ranging in size from five, ten, twenty, forty, one hundred and two hundred acres, and occasionally, five hundred acres. Larger tracts extend up on either side of the foothills and low mountain ranges. These hills are also timbered with oak, laurel, pine, alder and various kinds of mountain timber.

Berryessa valley is some eight miles long and from one to three miles in width, embracing about 17,000 acres. The soil and general characteristics of this valley are similar to those of Napa. Between these two valleys, to the northwest, lies Pope valley, which is some eight miles long, and from one-half to one mile in width, embracing 5,000 acres. Calistoga valley, a narrow, productive valley, some ten miles in length, and one-half mile in width, in all, embraces about 4,200 acres. Cona and Wooden valleys, also in this vicinity, each embrace about 500 acres. Capella, a smaller one, embraces from 600 to 700 acres. Besides these, the southern part of the county extends into what is known as Suedo valley, bordering on San Pablo bay. About 16,000 acres of this valley lie in Napa county. A large portion of this is wet land along the bay, and is used for dairying. Thus it will be seen that less than one quarter of this county is level land. The remainder is mountainous, ranging in height from the lowest foothill to Mount St. Helena, 4,343 feet.

Napa county is justly famous for the numerous mineral springs that are located within her borders. At the southern end of the county, about five miles north of Napa City, are situated the celebrated Napa Soda Springs, the waters of which have become famous for their curative powers. From the hidden treasury of nature's chemistry, in her subterranean laboratories, a perennial flow of about 5,000 gallons daily is developed, mingling sulphur, soda, lime, and magnesia, and of soda, with free carbonic acid gas, in such happy combination as to impart pleasure, health, and physical improvement as the result of their use. From these springs is poured forth the article so well known in the Southern States as "Napa Soda." The water is bottled and sold, just as it flows, from nature's laboratory, with all her sparkling freshness still upon it. The Hot Sulphur springs at Calistoga are also a great curiosity. There are 22 boiling springs, and, chemically speaking, no two are the same. In Pope valley are the celebrated Elva hot springs, where hundreds of health and pleasure-seekers bask themselves annually. Beautiful living streams are to be seen all over the county. Among the principal ones are Napa river, running the entire length of the county, and numerous creeks, viz. Cona, Suedo, Napa, Suedo, Carreras, Redder, Pulah, Elcena, Pope, Dry creek, etc.

Minerals of various kinds abound in Napa county. The only mining carried on to any great extent is for gold. Some of the geological formations of Napa are among the wonders of the world; viz. the petrified forest near Calistoga, the lava beds, on Mount St. Helena, and the tertiary sandstone. The great product of this county, and almost the only increasing one, is wine and brandy; the wine crop last year amounted to 2,650,000 gallons. This is one of the wealthiest counties in the State, considering the number of its inhabitants. The census of 1880 gave Napa a white population of 12,399.

#### Napa City

Is regularly laid out, with broad streets, which are handsomely shaded. The business portion of the town is built of brick.

#### St. Helena

An incorporated town of 1,200 people, is situated on the line of the Napa Valley Railroad, eighteen miles above Napa City, and within three hours' ride from San Francisco. The town contains many elegant residences and fine churches. The White Sulphur Springs, a beautiful summer resort, is located here. There are three trails north; Elva Springs, on the east—all have an enviable reputation for health and pleasure-seekers. Improved land in the valley is regularly sought for, at such a price might seem high to the unacquainted with the surroundings. Northwest, through the valley, a distance of one mile, is the terminus of the railroad.

#### Calistoga

A place of 850 inhabitants. This is also a summer resort, of considerable note. Midway between St. Helena and Napa, on the line of the railroad, is the village of Yountville, with 600 inhabitants. Oakville is four and one-half miles north, on the same line of railroad. One mile farther up the valley, through a fine, inclosed country, is Rutherford, which is merely a railroad station, to one of the finest locations we have seen in the State.

#### NEVADA COUNTY

Has an area of 650,240 acres, and lies high up in the Sierras. The greater part of the county lies from 100 to six thousand feet above the level of the sea. There are few portions of the world that can compare with it for variety of scenery and climate. The lower districts are little above the level of the sea, and are seldom visited by the snow. This county is one of the most beautiful in the State. It has several beautiful lakes, the most noted of which is Donner lake, situated on the southern line of the county. In the northern part of the county are Lake Independence and Webster lake; and after, there is a great resort, where a line of stage running from Truckee, on the C. P. R. R., up through some of the finest mountain scenery in America. There are a number of other beautiful lakes in this region.

Mining exceeds all other industries in the county. The ridge between the middle and south Yuba is distinguished by its vast and almost continuous lines of gravel hills, extending from the summit to the foothills. The water from 100 to 300 feet in depth, and millions of dollars have been expended in getting the water in pipes and ditches for miles to develop the claims. Among some of the most extensive of the companies are the following: Milton, North Bloomfield, Blue Tent, Quartz, and Highland creek. These, and a number of other private claims, have yielded away up in the millions. Prospectors are constantly making new discoveries in various parts of the county. Nevada county has 37 quartz-mines in operation, with no aggregate of over 500 stamps.

The lumber interest of the county is an extensive one. The timber consisting of pine, fir, spruce and cedar, is estimated of standing now timber lying in the county is about 550,000,000 feet.

The facilities of Nevada county, both for travel and shipping, are excellent. The main line of the Central Pacific runs along the southern line of the entire county, forming a junction with the Nevada county Narrow-gauge Railroad at Colfax, 193 miles northeast from San Francisco. The narrow-gauge road, 22 miles in length, was built by private capitalists from Nevada county citizens. The largest city in the county is

#### Grass Valley

With a population of 6,500, situated on the N. C. N. G. R. R., sixteen miles north of Colfax, and 208 miles north of San Francisco. It is located in a valley 2,500 feet above the sea level, in one of the best quartz-mining districts in the State. The majority of the mines in the vicinity are paying ones, while substantial business blocks and fine residences between the large measure of the community's prosperity.

#### Nevadaville

The county seat and second largest city in the county, has a population of 5,500. It is also the terminus of the N. C. N. G. R. R., and is situated on both sides of Deer creek, which lies in a deep canyon. It is spanned by a beautiful wire bridge. Two stage lines leave (daily) for Downsville, North San Juan, Forest City, Grantville, North Bloomfield, Lake City, Camptonville, Marysville, Dutch Flat, and all parts of northeastern California.

#### Truckee

Has a population of about 1,200. The town is principally supplied by the lumber from Lake City, and lies 250 miles northeast from San Francisco; it is the place where tourists have the railroad for Lake Tahoe. Eight miles east, along the river, is

is very profitable, as the location is below the snow belt and away from the fog belt.

#### New Castle

Has about 200 inhabitants, who are mostly engaged in the fruit business. The second largest town in the county.

#### Dutch Flat

Has a population of about 900, mostly engaged in mining and lumbering. There is an abundance of water here which has been brought in ditches and pipes at great expense. A daily stage is run from here to town Hill, Nevada City, a distance of seventeen miles.

#### Colfax

The third largest town in the county, has a population of about 600. It is located at the junction of the C. P. R. and N. C. N. G. R. R., seventeen miles northeast of Auburn. A daily mail runs from here to town Hill. Between Colfax and Auburn is

#### Clippers Gap

Where the famous Clippers Gap mine is located; this iron is known to be the best in the market.

#### Lincoln

On the Oregon division of the C. P. R. R., 29 miles north from Sacramento, are located the extensive iron works of Gladding, McBean & Co. At this place is also a coal mine, which yields very fair coal for steam engines and other uses. Seven miles further north, on the same road, is the village of Sheridan, located in a farming region.

#### Roseville

The junction of the railroad, eighteen miles northeast of Sacramento, has a population of 350. There is a number of other towns in the county, viz. Ophir, Alta, Chico Canyon, Elephant Gap, Gold Run, Forest Hill, Pluto and a host of other little mining camps. The census of 1880 gave Placer county a population of 14,622, which perhaps would reach 15,000 at present. The county assessors estimate that there are about 300,000 acres of fruit and grain land susceptible of cultivation, a great portion of which is yet in a natural state.

#### PLUMAS COUNTY

Lies among the mountains, in the northeastern part

cultural sections of the county, and contains 200 inhabitants. A fine location several miles from Quincy, on the Oroville road. Summit is a small town, in the eastern part of the county; it lies at an altitude of 7,000 feet.

#### Greenville

In the northern part, is one of the most thriving places in the county; it has 800 inhabitants. There are a number of smaller towns, or mining camps, namely, Copperopolis, Elureka Mills, Hot Springs, Indian Bar, Longville, Alabamas, and others. Plumas county, in 1880, had a white population of 6,180. It has large amounts of fine Government agricultural and timber land, and a fine location of settlement, with the capability of tripling its present population.

#### SACRAMENTO COUNTY

Is nearly quadrangular in shape, with an area of 670,000 acres. Near the junction of the Sacramento and San Joaquin rivers there are several large and fertile islands; Sherman, Grand, and others are among the largest. The soil of these islands is a rich vegetable and sedimentary deposit, and they are subject to addition in times of high water. The greater portion of the county is very rich valley, producing large crops of grain, hay, fruit, vegetables, hops and grapes. The valley portion is under a high state of cultivation. The boundaries of the county, on the east extend up to the Sierras, where there is considerable oak and other timber. Along the banks of the streams, there is considerable willow, sycamore and other timber, valued for fuel only.

#### Sacramento City

Has a population of 22,420. Immediately across the Sacramento river is the village of Washington, with several isolated more inhabitants. Sacramento is a San Francisco city, two lines connect directly with San Francisco; one north through the great San Joaquin valley, and thence overland to Los Angeles; the Central Pacific goes directly across the continent; two lines run north through the Sacramento valley, one on each side of the river; the Sacramento and Placerville road leads off into the Sierras, besides the navigation of the river for some miles all the year (both north and south) make the shipping facilities second to none in the State. The Central Pacific Railroad Company has added greatly to the general improvements of the city. Its immense work-shops employ from 1,600 to 1,500 men, and they have recently constructed rolling mills, where old iron railing is converted into bars, bolts, etc. The new passenger depot, the second finest in the State, is an ornament to Sacramento. The constant employment of so many men by the railroad companies and the different manufacturing and milling works which Sacramento is so justly famous, renders large capital here. The savings and other banks have a surplus capital, which is loaned throughout the State. Here is also one of the finest capital buildings in the United States. From its gilded dome may be had a view of the Sacramento valley, one of the most fertile in the world. The snow-capped Sierras in the background, the dark rocks of the Coast Range, with Mount Diablo standing out boldly in the center, to the west; the numerous railroad trains running out in every direction; the white sails of commerce sailing up and down the river; whose banks are dotted with numerous towns and villages, make this one of the grandest sights to behold. Sacramento is one of the healthiest cities in the State. The lowest temperature reached is 19 degrees, and the highest, for a few hours in the day only, is 102. The nights are always cool. All the fruits of the temperate and semi-tropical zones flourish, while the gardens are in a perpetual bloom. The second largest town in the county.

#### Folsom

Lies on the banks of the American river, which would afford, if improved, one of the finest water powers in the country. The granite quarries near Folsom possess an unlimited supply of the finest building stone in the world. This is in the edge of the gold mining district. Some of the mines in the vicinity are still being worked. The town has a population of 1,500, and the chief support is agriculture and stock-raising. The branch State prison is located here.

#### Galt

The third town, is situated in the southern part of the county, on the Central Pacific Railroad, at the junction of Jackson and Amador Railroad 32 miles south of Sacramento, in a fine, level, agricultural country. The present population is 500. Seven miles north, on the same railroad, is

#### Elk Grove

A town of about 350 people, located in a fine agricultural and fruit section as there is in the State. There are also extensive vineyards of raisins and wine grapes. Between the town and Sacramento city, on the railroad, are Florin and Brighton, surrounded by an excellent agricultural country.

#### Michigan Bar

Is an old mining town, southeast of Sacramento, and about 30 miles distant. An excellent quality of potter's clay is found here. Dairying and farming are its main supports.

#### Walnut Grove

Is situated in the midst of a fine fruit-growing section. On the southern end of the Audubon island is the village of Isolton. No richer soil can be found than this island possesses. The other towns in this county are Colusa, Franklin, Hixville, and others. The population of Sacramento county now amounts to no less than 35,000. At the delta of the Sacramento river, in this county, are Sutter, Gravel, Tyler, Auburn, and others. Twentieth and Imperial islands—all of brown, green, and blue—which are being reclaimed as fast as possible.

#### SAN BENITO COUNTY

Has an area of 658,560 acres, and contains a population of 6,500. The county is watered by the San Benito and Tres Pinos rivers and tributaries. These rivers run in a northwestern direction across the entire county. The timber is principally live, black and white oak, and some pine, in the mountainous portions, sufficient for fuel, but no saw timber. There is first about 25,000 acres of black oak and sandy loam in the valley along the streams, which will produce an abundance of vegetation. Second, about 34,000 acres of first-class grain land, that is known as San Benito valley, in reality the extreme southern portion of Santa Clara valley. The soil is a black adobe and loam, with a black sandy subsoil, and holds moisture well. It is principally on this land that the large amount of wheat, shipped annually from this county, is raised. Third, about 46,000 acres of what is termed second-class grain land, most of which is situated in the foothills, and is composed almost equally of adobe and sandy soil; on this land most of the hay crops are raised. There are numerous small valleys rising in every direction in the upper foothills, capable of producing very much wheat, about 100,000 acres. There is very little mountain land but what is suitable for grazing. Quicksilver abounds in the mountains; on the east side of the county there are ten to twelve locations which have been prospected with good indications. Chrome ore is also abundant in the county. Artisan well water is obtained through the valley in the northwestern part of the county; in the vicinity of San Felipe there are a number of flowing wells, at Hollister the water rises nearly to the surface by 110 feet.



THE YOSEMITE FALLS.

#### Boca

The largest shipping point, for its size, in the State. Fully 10,000,000 feet of lumber are shipped annually, and also 10,000 tons of ice by the Boca Ice Company. Here, is the celebrated Boca Beer Company.

#### North San Juan

Has a population of about 800. It is thirteen miles north from Nevada City, in the center of the gravel-mining district. The other towns in the county are North Bloomfield, Cherokee, French Corral, and Columbia Hill, all little mining camps, located north of Nevada City.

The census of 1880 gave Nevada county a population of 20,827, which would reach about 21,000 at this date.

#### PLACER COUNTY

Is located on the western side of the great Sierra range of mountains, northeast from Sacramento, and 178 miles northeast from San Francisco. In shape this county is nearly a parallelogram, being over 100 miles in length, from northeast to a southwestern direction, while its width, just above Auburn between Bear and American rivers, is very narrow, only about eight miles, and in its topographical features the whole of its territory faces towards the setting sun, extending from an altitude on the plains, in the western portion of the county, of some 40 feet to over 7,000 feet at its eastern boundary line, embracing nearly every variety of climate in the State. Its area is 915,000 acres.

The mineral resources are extensive and very rich. The gold mines of this section, both placer and quartz, have yielded up in the millions. Large amounts of capital have been expended in getting the water, in pipes and ditches, from the mountains, and the number of miles of ditches is several thousand. The quarrying and dressing of granite is an important item of the wealth of Placer county, there being no finer granite in the known world than the quarries of Perrys and Rocklin.

#### Auburn

The county seat, one of the oldest towns in Northern California, has a population of 1,500. The town is located nearly one mile west from Auburn station, on the C. P. R. R., 157 miles northeast from San Francisco. The elevation here is 1,375 feet above the sea level. The greater portion of the land in this vicinity is gold-bearing mineral, but, where water can be had, fruit culture

of the State. It has an area of 1,700,000 acres. The scenery is wild and picturesque; snow covers the summit of the mountains, and the lower slopes are clothed in magnificent forests of pine, fir and oak timber. This county has many beautiful valleys; among the principal ones are Big Meadows, Mountain Meadows, Indian, Genesee, American, Beckwiltz and Meadow valleys. The first named is some fifteen miles long by four wide, and is the largest; it lies adjacent to Mountain Meadows another of nearly the same size, and several other valleys, the whole constituting quite an elevated plateau, 4,500 feet above sea level. Indian valley, an important and prosperous district, is eleven miles in length, and two miles wide. American valley is nearly the same size, and both connect with smaller valleys. In the mountainous portion of the county are high ridges, sharp canyons and deep canyons, through which tumble beautiful streams. Plumas is one of the best watered counties of the State, with living streams running through all of the valleys. A good share of the wealth of this county is claimed to be in its mines, a great many gold claims having been taken up in the hills; extensive operations are carried on in different places, both by placer and hydraulic methods.

Plumas also has a large amount of excellent saw timber, which will be come valuable in time, although there is but a small area of level valley land, practicable for farming, yet this industry is quite prosperous. In addition to grain and vegetables, this is quite an important stock-raising county, and an excellent locality for fruit, such as apples, peaches, plums and cherries. As yet there are no railroads in Plumas county, but all the principal towns are connected by stages, which run, on good wagon-roads, to Oroville, Butte county, on the west, and to Reno, Nevada, on the east.

#### Quincy

The county seat, is situated in American valley, one of the most fertile hills valleys in the State. The town is pleasant and attractive, as it is situated in the midst of the Sierras, which are here covered with dense forests of timber. Quincy has a population of 600, that depends equally upon the mining and agricultural interests in this district. It is 65 miles northeast from Oroville, the terminus of the railroad, and is easily reached from there by means of the Quincy & Reno stage line, a great many through the towns of Long valley, Junction, Elureka, Johnstown, Beckwiltz and Summit.

#### Taylorville

The principal town, is one of the most prosperous agri-



**Hollister.**  
Has a population of 1,800, and has a splendid system of water works, supplied from three artesian wells.

**San Juan.**  
Is one of the old land marks of California. One of the old missions, 160 years old, is still well preserved and used for Catholic service. The town contains 650 inhabitants, and is the second largest town in the county.

**Tres Pinos.**  
Contains 150 inhabitants, and is the shipping point of a large amount of grain and hay for the southern portion of the county.

**San Felipe.**  
Located in the northeastern part of the county, near the line between this and Santa Cruz county, is noted for the large amount of tobacco raised. San Benito is capable of exporting six times the present population. It has a good climate and rich soil.

#### SAN BERNARDINO COUNTY.

The largest in the State, contains an area of 15,022,000 acres of surface, larger in extent than several of the New England States, together. Fully 13,720,000 acres of this vast country is a barren desert and mountain waste, or mineral lands. According to the best information we could get, there are about 200,000 acres fit for agricultural purposes and fruit culture. These lands are nearly all in the southwestern portion of the county, which is called San Bernardino valley. The mountains surrounding the valley are filled with magnificent forests of pine, cedar, and other timber. In resources this county can boast of as great a variety as it can of climate and physical features. The numerous and rich mining discoveries which have been made during the past two years, are already attracting considerable attention abroad. No less than eighteen different districts are known, some of which have quartz mills in operation. Numerous placer mines have been worked for many years in different portions of this vast territory; the principal ones of which are known as the Little creek placers, Bear valley mines, Lone valley mines, Black Hawk mine, Dry lake district, New York, Alford, Iraupah, Mohave, Oro Grande, Grapevine, Calico mountains, Orr, Bladen, Placerville, San Antonio, Silverado. All of these districts are known to have good paying mines. These mines offer great inducements to capital, which is bound to find its way here, and the returns from the developments will bring in a fine revenue from this part of the State. From the agricultural portion of this county the staple product is barley, a winter crop, and, in ordinary good seasons, it yields heavily. Alfalfa, which is the principal hay crop, is cut from five to seven times annually, yielding, at each cutting, about two tons. Vegetables of all kinds attain an enormous growth, as do all other agricultural products. The cultivation of semi-tropical fruits has, of late years, received a large share of attention, and immense tracts of land have been devoted to their culture. The principal fruit section is in and around Riverside, where there is a stretch of country some twelve miles in length, devoted entirely to semi-tropical fruits, and already the owners are receiving handsome incomes from their orchards. Besides semi-tropical fruits all those of more northern latitudes can be raised, and apples and berries raised in the mountains are unsurpassed for size and flavor. Figs, almonds, and, in short, all kinds of fruits and nuts do well here.

Another important industry of the county is apiculture, to which, of late years, a great deal of attention has been devoted. Large quantities of honey have been and are continually being shipped from this county to the East and Europe.

#### San Bernardino.

The county seat, and the principal town, has some 3,500 inhabitants. It is thickly studded with trees, as is indeed the whole valley, which, with the bright green of the gardens and surrounding fields, give it more the appearance of a New England village than a California town.

One of the great advantages enjoyed by San Bernardino is its abundance of water. Almost surrounded by mountains, numerous streams pour into it from all directions, while artesian water can be obtained almost anywhere in the valley, by sinking from 30 to 300 feet. There are now over 600 flowing wells in the valley, affording pure water for the household, as well as for irrigation. Owing to this abundance of water, the farmers have less dread of a dry season than is experienced in other parts of the south, while a failure of crops is a thing wholly unknown.

#### Riverside.

Although quite youthful, is a thriving settlement. It is almost entirely settled by Eastern people, many of whom have located here for their health; some for the pleasure of this mild climate, and some for the purpose of raising semi-tropical fruits, to which the entire section is devoted. The settlement of Riverside is a colony, and is about twelve miles in length, by about four wide. The people depend wholly on irrigation. The colony has the water right of the Santa Ana river, which beads up in the mountains northeast from San Bernardino, and also the water furnished by some 450 artesian wells, from San Bernardino valley is allowed to flow into Riverside. The river is taken out of its course, and distributed through hundreds of small canals and ditches, for the purpose of irrigating the immense orange orchards in the place. This is certainly one of the handsomest places in California.

#### Lugonia.

Is the name applied to that portion of San Bernardino county lying between Old San Bernardino and Crofton. The village is delightfully located. The fruits of the citrus family—the peach, apricot, and grape—are principally grown, and are, with the olive, the most profitable.

#### SAN DIEGO COUNTY.

Borders on the Mexican territory of Lower California. It is the second largest county in the State, having an area of 9,580,000 acres. The surface of this county is known as mesa lands. The most important topographical feature of the county is the bay of San Diego, one of the few natural harbors of this coast. It is a fine sheet of water, twenty miles long by three wide, is almost land locked, and has a safe entrance and a good anchorage for the largest sea-going vessels. The Southern Pacific Transcontinental Railroad passes through San Diego county, from the northwest border to the southwest corner, for a distance of 165 miles. The California Southern has recently been built, from Calton, on the S. P., south to San Diego City, a distance of 120 miles. The Pacific Coast steamers

make regular trips between San Francisco and San Diego, every five days. The Colorado river, along the eastern border of the county, is navigable for steamers. These combined give San Diego county the best of shipping facilities, both by rail and water. San Diego is the oldest settled county in the State. The bay was first visited by white men under Cabrillo, in 1542, only 60 years after the discovery of America.

In the fertile portion of the county, or in the two sections west of the desert region, are more than 30 valleys, from two to fifteen miles long, and embracing from a few hundred to 20,000 acres; several of these valleys are very fertile, with a dark alluvial soil, while the rolling lands are of a reddish nature, underlain with a clay subsoil. These lands, up to a few years ago, were considered valueless; but it has been proved that by proper cultivation they are quite productive. Irrigation is, at present, in advance of railroading or any other interests. The large products are wheat, barley, wool, honey, and semi-tropical fruits. Oranges, lemons, limes, olives, peaches, almonds and English walnuts all do remarkably well.

#### San Diego City.

Is beautifully situated on the shore of the bay of the same name, with a population of 3,000. Its salubrious climate, which is very mild, and certainly the most equable in the world, has made San Diego a noted sanitarium.

#### North City.

Some four miles south from San Diego, is a place of several hundred inhabitants. The shops of the railroad of which it is the terminus are located here. Banner, a new town, about 50 miles north, east from San Diego, is situated in the San Felipe canyon. Grain, fruits and vegetables of all kinds grow in the neighborhood. Gold mining has been carried on here to some extent since 1874. Julian, a little mining town, is 45 miles northeast of San Diego, among thickly wooded hills, in a grazing and agricultural country.

#### Port Yuma.

The extreme town of the State, is 196 miles east of

\$30,000 to \$40,000 have been built in different portions of our city.

#### Manufactures.

There are some 850 different manufacturing establishments in this city, 297 of which are incorporated companies, and altogether employ 40,000 mechanics, making a total yearly manufactured product of over \$75,000,000; these will be largely increased the coming year. The mammoth sugar refinery of Claus Spreckels, recently completed—a ten and twelve story brick—at a cost, including machinery, of \$1,200,000, will turn out, when in full operation, 600 tons of sugar per day. There are 32 iron and twelve brass foundries in the city; one rolling mill, giving employment to 450 men and boys; one wire rope factory, employing some 60 hands; three glass works, two of which were established in 1881, furnishing employment for 250 men and boys, who are principally engaged in manufacturing bottles, jars, and small wares; no window glass has as yet been made, but it is the intention to start such a factory this year; one rope-walk, furnishing employment to 50 men and 120 boys; ten flour and six feed mills are constantly employed, furnishing flour and feed, which is largely exported to foreign countries; 59 tanneries are represented in this city; some of these, however, are located in different parts of the State, and have their headquarters here. We also have 32 breweries in this city; the Boca, located in the Sierra Nevada mountains, has its headquarters here, and the Fredericksburg, of San Jose, has also an agency. There is an unusually large amount of beer manufactured in San Francisco. A number of our largest brewers are increasing their capacity. There are three distilleries in the State, two of which are in this city. The manufacture of cigars and tobacco has largely increased during the past year. There are about 500 white men, 200 white females, and 4,500 Chinese employed in the manufacture of cigars. About 700 hant and shoe establishments are in the city, employing 3,500 hands; it is estimated that fully 2,900 of these are Chinese. The manufacture of clothing and underwear has increased from 25 to 40 per cent. We have six extensive box factories, employing 450 men and boys; besides a number of smaller establishments of this character, there are a large number of important industries that cannot appear in so brief an article as this, such as powder works, bag factories, silk factory, jewelry works, carriage and wagon factories, billiard table works, wine tank builders, sash,

on to some extent, while sheep husbandry is quite an important industry.

#### Stockton.

The county seat of San Joaquin county, is located at the head of the Stockton channel, on the line of the O. P. R. R., 91 miles from San Francisco by rail, and 117 miles by water. This channel is a wide and deep arm of the Sacramento river, which is navigable for vessels of 600 tons capacity. The city extends over an area of four square miles. The character of its buildings are generally very substantial and good, the business portion being built almost entirely of brick. A system of street railroads affords easy accommodation between various parts of the city. Stockton is conceded to be the most important grain market of the Pacific Coast, outside of San Francisco. The deep, navigable channel, radiating from the river into different points in the city, give a convenient water front of many miles in extent, such as is not possessed elsewhere in the State. Substantial wharves have been built, with an aggregate length of nearly a mile. In facilities for transportation, Stockton is unusually fortunate. Railroads radiate from this center in all directions. The manufacturing industries of Stockton are only second to San Francisco. She has made rapid strides in her manufacturing during the last five years. Two of the largest and most complete flouring mills on the coast were built here last year. Paper mills, several extensive agricultural machine shops, tanneries, woolen mills, carriage and wagon factories and ship-building furnish employment for more men than any other city of its size on the coast.

#### Lodi.

Has sprung into existence since the construction of the C. P. R. R., and is now a beautiful village of 1,000 inhabitants. It is located in one of the finest agricultural and fruit sections in the State. Two and one-half miles northwest from Lodi is

#### Woodbridge.

Beautifully situated on the banks of the Mokelumne river, at the head of navigation, fourteen miles from Stockton. Eight miles northeast from Lodi is

#### Lockford.

In the center of a fine farming community, and contains a population of 450.

#### Linden.

Twelve miles east of Stockton, is surrounded by the richest farming lands in the county. This section is beautified by scattered oak trees, giving the landscape a fine appearance. The town contains about 150 inhabitants, and the surrounding country is considered the finest wheat-producing section in the county. Sixteen miles from Stockton, on the line of the Stockton and Copperopolis Railroad, is the village of

#### Farmington.

Surrounded by a rich farming country. The farmers in the vicinity are nearly all engaged in raising wheat. The town contains about 200 people. Ten miles south from Stockton is

#### Lathrop.

The junction of the Central and Southern Pacific railroads; it contains a splendid hotel. About fifteen miles southeast of Lathrop is

#### Tracy.

With 100 people. The other towns in the county are: New Hope, 50 inhabitants, French Camp, 75; Atlanta, 50; Acampo, 75 to 150; Bantam, 30; Belinda, 50; Collegedale, 50; Elkhart, 50; Peeters, 40.

#### SAN LUIS OBISPO COUNTY.

Contains 2,022,400 acres, 491,337 of which are covered by Mexican grant titles, and 1,531,063 acres are United States Government titles. It is well watered on the west side of the range of mountains by numerous small living streams that lead up in the mountains, and by springs which find their way west to the ocean. The Salinas and San Juan rivers, with their numerous branches, bend in the southeastern portion of the county, running in a northerly direction into Monterey county. The soil in the valleys on the west side of the range of mountains, is extremely fertile, being generally of a black adobe and loam nature, the latter predominating. The valley lands are well adapted to raising grain, principally barley, oats and wheat. The rolling and hilly portions of these lands are mainly the same soil, only not so rich, and are better adapted to dairying. On the east side of the range of mountains the soil is more of a gravelly nature. The rainfall here is light and the climate warm. The soil is well adapted to raising grain, fruit and grapes. At present large bands of sheep are kept upon it. About one-fourth of San Luis Obispo county may be considered as mineral lands. Chrome iron ore and quicksilver are found in many places, in paying quantities.

#### San Luis Obispo.

The county seat, is located about nine miles from the sea coast, and is connected by the San Luis Obispo and Santa Barbara Railroad with Port Harford, the shipping point for the town. The city is situated between the hills on the San Luis Obispo creek; it is an old Spanish settlement, and was first settled in 1773, when the old Mission church was established. Up to the 1872-3 it remained a town of a few adobe buildings, with only a few hundred inhabitants, when the American settlers came in the same year, and the present population is 3,800 inhabitants. The San Luis Obispo and Santa Barbara valley has recently been extended from Port Harford, via the city to

#### Arroyo Grande.

A distance of 31 miles south. This place has a population of 600, and is situated in a fine agricultural section.

#### Cynona.

Has sprung up within the last two years, and now has several hundred inhabitants. Land in this vicinity is considered the best dairy land in the State. It is principally settled by Swiss dairymen. The village of Morro is situated about five miles south on the coast. Here is a natural harbor, on Morro bay, where a wharf has been built. In the vicinity the land is sandy, and it is better adapted to farming than dairying.

#### Cynthona.

has 350 inhabitants, a good school, five stores, and two carriage and wagon shops. Its chief support is the dairy interest. Several rich quicksilver mines are in the vicinity, but are not worked, at present, on account of the low price of the metal. One hundred miles distant, is

#### San Simeon.

The finest landing south of San Francisco. It possesses a good wharf and warehouses, and the Pacific Coast steamers call twice a week. The Government



BRIDAL VEIL FALLS.

San Diego. The fort was established in 1849, when the territory across the Colorado river belonged to Mexico. The post is on the right bank of the river, 180 miles from its mouth, and directly opposite the mouth of the Gila. This is considered the hottest place on the Coast, as there are, on an average, 350 clear days in the year. There are a number of smaller towns and precincts in the county. The population in 1880 of this vast scope of country was 8,618, but will number fully 12,000 at present.

#### SAN FRANCISCO COUNTY.

In May, 1850, the City of San Francisco first entered upon its formal and legally recognized existence as an independent municipality. The County of San Francisco had been duly organized the month preceding. For upwards of 60 years the two distinct governments contemporaneously maintained independent administrations with the same geographical limits. On the first of July, 1850, the Consolidation Act, uniting the two, under the name and title of "The City and County of San Francisco," was passed. Although but 27 years have elapsed since the accomplishment of this consolidation, reckoning from its independent birthday of May, 1850, 34 years last May of the present year, will be the exact age of the city. The total land area of the city and county is 26,681 acres, by far the smallest county in the State, its average breadth from ocean to bay being four and one-half, by six and one-half miles in length. The peninsula on which the city is located is about 30 miles long by fifteen wide, the city and county occupying the western end. There are 1,097 streets, avenues, and alleys, which appear on the map of the city, and 27,550 buildings, about 5,000 of which are brick; the balance is of wood. There are 92 church organizations, all of which have houses of worship in various parts of the city. Twenty-three large brick business blocks have been added, all of which are four and five stories high; besides these over 250 dwellings were built or commenced last year. They are generally neat, two-story modern style houses, costing from \$2,000 to \$10,000. Several very elegant residences, costing from

door, and blind factories, soap works, agricultural works, mirror works, glass factories, type foundries, trunk factories, terra cotta works, silico works, furniture factories, harness and saddle factories, fruit canneries, oil works, marble works, cracker bakeries, glove factories, etc. It is impossible to give a detailed description of the metropolis of the Pacific Coast in an article as brief as we are obliged to make this, but a fine bird's eye view, with its hundreds of ships and steamers, from all parts of the world, lying at anchor, will give our Eastern and European readers a fair idea of San Francisco.

#### SAN JOAQUIN COUNTY.

Has an area of 328,000 acres, 876,287 acres of this is owned and assessed, thus leaving only 51,813 acres for waste land, which is river-bed and some broken land in the northeastern and southwestern portion of the county. It is watered by the San Joaquin river, which passes through it from south to north, appearing into three channels a few miles above Stockton, and taking in its embrace two of the largest islands in the State. No streams of any importance enter it from the west, but on the easterly side, within the limits of the county, the Mokelumne and Stanislaus rivers join the San Joaquin, with a flood antecedent, in certain seasons, to render them unavigable for a considerable distance, and furnish a supply of water adequate to the irrigation of the lands lying between them, embracing the richest section in the county. The soil of the river bottoms is a rich sandy loam, well adapted to the growth of sweet potatoes, hops, corn, peanuts, flax, lup, jute, ramie, chile, melons, small fruits, vegetables and all manner of root crops, producing enormously. The county occupies a most favorable and important position, on account of its accessibility to the markets of the world, its navigable streams, its excellent railroad facilities; its large area of tillable soil, of the most productive character. While grain-growing predominates over all others, stock-raising forms no inconsiderable part of the industries of the county. Dairying and the raising of fine cattle are carried



has erected a lighthouse. The town is small, and the land for miles around is all owned by one man. The Paso Buñes hot and chert sulphur springs are 28 miles from San Luis Obispo by stage. These springs are famous throughout the United States, and are visited by tourists and those seeking health from all parts of the world.

The other towns in the county are Cholame, Josephine, La Panza, Musick, Pozo, and San Miguel, which are all quite small. In 1880 the population of this county was 9,142, but the railroad has been extended and many of the large "ranchos" are being subdivided, and settlers are taking advantage of these cheap, productive lands, so that the present population is fully 10,000.

#### SAN MATEO COUNTY.

The Gabilan Sierra Moreno, or Santa Cruz mountains, traverse the entire length, and occupy nearly one-half of its surface; yet, fully one-half of San Mateo county is susceptible of cultivation. On the east, or bay side of the county, is one of the finest little valleys in the State. On the ocean side there are also from 17,000 to 20,000 acres of level land. Besides these, there are several other valleys, such as Canada Raymond, Upper San Gregorio, Pomona, and others of lesser note. This county is only about five miles wide at its north end, and some eighteen at its southern end, with a length of 42 miles. San Mateo is exceedingly well watered by numerous small streams and springs. As is well known, San Francisco draws her water supply from San Mateo. The Spring Valley Water Company has large reservoirs and works along the entire length of the mountains. On the ocean side the fog rolls in from the Pacific, and keep vegetation green the greater part of the year. This county has every variety of soil, the most of which is very fertile. The productions are barley, hay, oats, wheat, potatoes, cabbage, and all root crops. Shipping facilities are excellent. During the last twenty years, the successful business men of San Francisco have built beautiful country residences along the line of the railroad for nearly its entire length, extending to San Jose, a distance of fifty miles. Small towns are scattered throughout the county.

#### Redwood City.

The county seat, is most beautifully situated along the bay, on the east side, with both water and railroad communication. It is only 29 miles south of San Francisco, and has about 1,500 inhabitants. In its vicinity are some of the finest country residences in California.

#### Spauldingtown.

The second largest town, is situated on the coast, on Half Moon Bay, in a fine agricultural country; it contains about 1,000 inhabitants. San Mateo, Menlo Park and Belmont are really suburbs of San Francisco, and they contain many of the wealthiest citizens.

#### Pescadero.

Is a fine summer resort, and is surrounded by an excellent agricultural country. The other towns are Searsville, Milbrae, Woodside, Hands, Purisima, and San Gregorio. The population of this county, in 1880, was 7,674; but, at the present writ it would amount to fully 9,000.

#### SANTA BARBARA COUNTY.

Lies between San Luis Obispo on the north, Ventura on the east, Santa Barbara channel on the south, and the Pacific ocean on the west. The islands in the Pacific, some 20 or 30 miles out, belong to this county. Below Point Conception the coast line bends sharply to the eastward and parallel with this line is the Santa Ynez range of mountains, from 3,000 to 4,000 feet in height, traversing the county from east to west. Beyond the range, running in a northwesterly direction, lie the San Rafael mountains. A large portion of the northern part of the county is a rugged, mountainous region, containing a few small valleys which are fertile, but the balance is a rocky, barren waste. Between the Santa Ynez mountains and the bay lies the celebrated Santa Barbara valley. This valley is unparalleled in the world for its healthy, equable climate, the islands in the ocean breaking the winds. The most delicate flowers bloom every day in the year, and invasions come here from all parts of the world, and many of them permanently settle here. The soil of this valley is of a dark, sandy loam. The shortest way of reaching

#### Santa Barbara.

Is by the way of the Coast steamers, a distance of 300 miles as the crow flies, but within a span of three miles again, gradually rising from the sea to an elevation of 300 feet. The city, at present, has 5,000 inhabitants. In the gardens of Santa Barbara may be seen the palm from India and other delicate plants from China, Australia, Africa and South America. Tropical jessamines, the cedars of Lebanon, the Egyptian paper plant, the honey tree of south Africa, the camphor tree of Japan—in fact, one can see a greater variety of choice and rare plants, trees, and flowers in Santa Barbara than in any other spot in America in the open air.

#### El Montecito.

Contains many handsome residences, and is, properly speaking, a suburb of Santa Barbara. This valley lies close to the foothills, and opens to the southwest into the sea. The farms are mostly small, and under a high state of cultivation. The banana, a native of the south sea islands, may be seen growing here, and, in some places, in this vicinity, the land is heavily timbered. Water is abundant throughout the valley. A large portion of the county is well adapted to farming.

#### Lompoc.

Is in the northwestern portion of the county, where, a few years ago, no sign of a habitation could be seen for miles, except, occasionally, a herder's camp. Now, beautiful farms, fields of grain, cottages and school houses greet the eye on every hand. Lompoc has about 500 inhabitants, and it will, ere long, be a railroad town. The S. P. O. & S. M. road is to be extended from Arroyo Grande, which is now completed from Port Harford, a distance of 29 miles.

#### Guadalupe.

Is situated in a fine agricultural country, and has about 400 inhabitants. Center City, a small village some ten miles east of Guadalupe, has a pleasant climate, and the surrounding scenery is very attractive. Los Alamos is a small settlement on the rancho of the same name. The Los Alamos valley, which is of extraordinary fertility, is mostly rented in small tracts to farmers.

#### Carpiñenteria.

Is in one of the most fertile valleys in California, which is mostly devoted to the culture of the Llama bean. A new industry has just been inaugurated

here, viz: the cultivation of flowers for distillation, such as roses, violets, jessamines, orange flowers, etc. The village in the valley, of the same name, has several hundred inhabitants.

Guadalupe is a small village, eight miles northwest of Santa Barbara, and claims 200 inhabitants. The population of Santa Barbara county in 1880 was 9,593, which has increased, within the past two years to about 10,000.

#### SANTA CLARA COUNTY.

This is one of the most prominent counties in all California in agriculture, horticulture, climate, and beauty of scenery. It has close connection with San Francisco by three lines of railroad, also water communication via the southern arm of San Francisco bay.

The topographical features of the county are the two ranges of mountains on either side, with the large valley of Santa Clara between, a level, fertile plain, running down from the northwest to the southeast the entire length of the county; it is about 54 miles in length and from 12 to 18 miles wide. The county has an area of 523,728 acres.

But few counties have better water facilities than Santa Clara. The most interesting feature of the valley is the flowing wells. Artesian water is obtained in the country around the head of the bay, and extending southward to, and including the city of San Jose, in fact to the extreme southern portion of the county. In the vicinity of San Felipe large flowing wells are easily obtained, varying in the different localities from 50 to 350 feet. No better soil is found in the State than Santa Clara valley possesses. It varies, in some places, being a rich adobe, many feet in depth, in others a black sandy loam, and in others of a reddish gravelly loam with clay mixed with decomposed rock. This latter is regarded as the natural soil for the grape, the choicest and tenderest varieties of which grow here to perfection. On the hill-sides the soil is mostly of a gravelly and clay nature, making the best of orchard and vineyard land, where the almond, pear, apple and many other varieties of fruit are successfully raised. Many small valleys are scattered through the mountains on either side of the Santa Clara valley.

#### San Jose.

Is the county seat, with a population of 16,000. It



MIRROR LAKE.

ranks first in architectural beauty, location, general neatness and educational advantages of any city in the State. It has a system of street railroads through different portions of the city, two competing lines to the town of Santa Clara, a distance of three miles; one out to the Willows, where may be seen the finest orchards in the State. San Jose has an abundant water supply. Los Gatos creek is for trout in pupae from the Santa Cruz mountains, besides the numerous artesian wells throughout the city.

#### Santa Clara.

Is a beautiful town of 2,500 inhabitants, only three miles from San Jose, and is connected by two lines of steam and two lines of horse railroads. This is quite a manufacturing town.

#### Los Gatos.

Is 308 feet above sea level, and has a population of 750.

#### Alviso.

Is situated at the head of navigation on the Bay of San Francisco and on the line of the S. P. C. R. R., and at one time, before the railroads were built, was quite an important port. It has some of Santa Clara's largest brick warehouses, a flouring mill, one store; a line of daily steamers from here to San Francisco.

#### Agua's Station.

Is on the S. P. C. R. R., between San Jose and Alviso, in a fine fruit and farming country.

#### Gilroy.

Contains a population of 1,600, and is a fine agricultural country in the Santa Clara valley. There are several other small towns in this county: Milpitas, on the S. P. R. R., 42 miles from San Francisco, and Mayfield, a nice little town, only 35 miles from San Francisco. Santa Clara county contained 35,097 inhabitants in 1880, which would number 38,000 at the present time.

#### SANTA CRUZ COUNTY.

Is one of the smaller counties of the State, embracing 276,400 acres, about one-third of which is fertile valley, plateau and rolling hill land, and fully 10,000 acres of rich bottom land. The county is about 30 miles long from a northerly to a southerly direction, and nearly fifteen miles wide. The county is exceedingly well watered, first by San Lorenzo river and its numerous branches, heading up in the northern portion of the county, running in a southern direction and

emptying into Monterey bay near the city of Santa Cruz.

Pejaro valley, one of the most charming and productive valleys in all California, is in the southeastern portion of the county. It is about fifteen miles long and from six to ten miles wide. The soil is of the richest garden land, seemingly inexhaustible. The valley is situated close to the sea, with a railroad running through it, and it is made up of beautiful fields, fine orchards, deep alluvial bottom lands and fertile hill-sides, winding streams fringed with trees, and here and there several beautiful lakelets, a range of wood-covered mountains on the northeast, the dancing surf of Monterey bay on the southwest. Northward, near the mountains, is Corrales valley, running in an opposite direction, a beautiful stream by the same name flowing through it. Further up is Green valley, which extends to the timbered mountains, where the redwood timber belt is reached, which extends the entire length of the county, affording good facilities for building roads up the canyons, making the redwoods accessible for lumbering. The country is well supplied with railroads and shipping facilities. The South Pacific Coast Railroad is a direct line from San Francisco to Santa Cruz (distance, 80 miles) through the most romantic scenery on the coast. The Pacific Coast Steamship Co. have a regular established route here; besides there are numerous other vessels constantly visiting the port for lumber, lime, leather, powder, grain and dairy products. The town is well built. The business houses are on the principal street, and are mostly built of brick.

#### Pellon.

Is quite a lumbering and lime producing place. There is a V mine extending fourteen miles up into the redwood forests, where several saw mills are located manufacturing lumber and shingles, which are floated down the flume to the railroad, and shipped on the cars to San Francisco. The Santa Cruz Big Tree grove is but one and one-half miles from here.

#### Sagiet.

Is located in a rich agricultural country. A paper mill, saw mill and tannery are located here. The place has many attractions, and contains 200 people.

#### Aplos.

Lies between Soquel and Watsonville, eight miles east of Santa Cruz. Mr. Claus Spreckels owns a

#### Redding.

The present northern terminus of the O. D. of the C. P. R. R., is a growing town. It is the largest town in the county, and contains 1,500 inhabitants. Freight teams from Yreka, Scott's valley, Big valley, Copper City, Weaverly, Mount Shasta and all directions centralize here for the distribution of supplies and merchandise.

#### Anderson.

Is a beautiful little village on the railroad, twelve miles south of Redding, in a fine agricultural country. It has a population of 250. Five miles south, in the same valley, and also on the railroad, is

#### Cultuswood.

In the extreme eastern portion of the county. Large amounts of wool, sheep and cattle are shipped from here to Sacramento and the bay.

#### Wickertown.

Is a mining town, five miles north from Shasta, in the western part of the county. There is a number of good paying gold quartz and placer mines in the vicinity. The place contains about 150 inhabitants, principally miners.

#### French Gulch.

Fifteen miles north from Shasta, is one of the oldest mining towns in Northern California. The famous Deadwood mines are in this vicinity. The place has about 200 people. The principal agricultural town in the county east of Sacramento river, is

#### Millsville.

Containing 400 inhabitants. The place lies twelve miles east of Anderson, and has a good mountain trade.

#### Copper City.

Lies in the central portion of the county, surrounded by some of the best paying mines in the northern part of the State. South and west from here is a number of smaller towns, viz: Centerville, Horse-town, Piety Hill, Jonesville and Igo, the last of which is the most important. On the east side of the Sacramento river is a number of small towns, all supported by the mining interests in their immediate vicinity, they are: Furnaceville, Buckley, Churchtown, Burgettville, Parkville and Dug Creek. About 100 miles east from Shasta is Fall river, a lively agricultural town of 250 people. Lower Soda springs is situated some 60 miles north of Redding. The waters of these springs have medicinal qualities, which are bringing them into notice. Castle lake, near Castle rocks, is one of the most picturesque scenes in California. The Clover creek falls are 50 feet high, and are considered quite romantic. To the tourist the natural scenery is grand and sublime, and second only to Yosemite. Mount Shasta's stupendous beauty has inspired the minds of poets and poets with its grandeur, such as no scenery on the coast has ever done before. It is visible from all northern California, towering with its perpetual snow-covered peaks, 14,400 feet above sea level, and is just across the line in Siskiyou, Shasta is but sparsely settled to what it will soon be. At present the population is about 10,000.

#### SIERRA COUNTY.

Is the most elevated county in California, the lowest point within its limits being over 2,000 feet above the sea level. It derives its name from the Sierras, which cross the county from north to south embracing the whole of its territory. It has an area of 531,200 acres, extending east and west some 60 miles, and 30 miles from north to south. Some of the highest peaks reach 10,000 feet above sea level. Table rock, Sadie rock, Mount Filmore and Fir Cap all reach 6,500, and Sierra Blanca is nearly 9,000 feet. This is one of the landmarks of the State, and from its summit, looking eastward, can be seen the black timbered ranges intervening between the haze overhanging the valley of the great Sacramento, while in the distance, darkly outlined upon the horizon, is the Coast Range. Below, north and south, are seen the great gorges of the north and south branches of the Yuba river. This beautiful romantic scenery and delightful climate are rarely equaled in any part of the country. It is enriched with magnificent coniferous forests of red spruce, white or balsam fir, cedar, sugar and yellow pine timber, of which there are 35,750 acres, with an estimate of over 200,000,000 feet of saw timber in the county. Mining, in its various branches, is the chief industry. The extensive gravel mines found here have been worked since the discovery of gold in California. Crossing Sierra in a northerly direction is a continuation of the rich, ancient river channels that pass through Nevada county. These have yielded millions, and will continue to yield millions for centuries to come. There are a number of good paying gravel mines. Quartz mining is now the leading industry. Some of the most prominent ore bodies are those of the Sierra Buttes, located near Sierra City, and discovered in 1851; they have been in operation ever since. Nearly all of the cultivated land is located in Sierra valley, which is situated in the eastern part of the county, at an elevation of 5,000 feet. The valley contains about 45,000 acres of good farming land.

#### Dowdville.

The county seat, was settled in 1849, and is situated on both sides of the Yuba river. The town lies in a deep canyon, enclosed on all sides by mountains fully 2,000 feet high. It was once the busy center of the richest gravel region in California. The streams are spanned by two beautiful bridges. Like all mining towns, Dowdville is irregularly laid out, the streets following the bend of the river.

#### Sierra City.

Is supported exclusively by miners, as it is one of the richest quartz mining sections in the State. It has a population of 2,200, and has a lively appearance.

#### Forest City.

Has a population of 800. The Bald Mountain mines, located here, have yielded over \$2,000,000, and paid \$820,000 in dividends. The

#### Mountain House.

Is a general stage center, 35 miles northeast from Nevada City. Stages run from here to Nevada City, via Camptown, to Downsville and Marysville, making connection with all the mountain stages throughout northeastern California. Several other towns are Goddard's Dr. Monte Christo, Seales, Piety Hill, Mount Pleasant, Murphysburg, Gibsonville and several other mining camps.

#### SISKIYOU COUNTY.

The largest in northern California, has an area of 3,590,000 acres. The principal industries of the county are mining, stock-raising and lumbering.

(CONTINUED ON FOURTEENTH PAGE.)



SAN FRANCOISCO.....AUGUST, 1883

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

**First Page.**—Sir Benjamin Deane.—Triennial Committee.—The Wonders of the Yosemite Valley.

**Second Page to Eleventh Page.**—California.

**Twelfth Page.**—California.—The Coming California.—California.—Dairying in California.—A Good Agricultural Season.

**Thirteenth Page.**—Over-production.—The Industrial Fair.—Wheat on the Pacific.—Grain Acreage for 1883.

**Fourteenth Page.**—California, Continued.

**Fifteenth Page.**—California, Continued.

**Sixteenth Page.**—Methods of Reduction for Copper Ores.—A Good Season for the Apple.—A Distinguished Visitor's Impression Regarding California.—A Large Irrigating Canal.

**Seventeenth Page.**—Ruthvenism and Mann's Under-estimation of the Value of the Land.

**Eighteenth Page.**—The Egevan Vineyard.—Norcross & Co.—Fireman's Fund Insurance Co.

**Nineteenth Page.**—How Lands Increase in Value, the Problem of the Future.

**Twentieth Page.**—Inquiring as to the Capacity.—Imporation of Oranges.—Three Orange Trees Contributing to the Fruit Trade.

**Twenty-first Page.**—A Mountain Vineyard.—California Dried Fruit.

**Twenty-fourth Page.**—Future of Northwestern California.—A Good Section for Crops.—Rich Silver Deposits.

## CALIFORNIA

Has an area of one hundred and fifty-eight thousand three hundred and sixty square miles, with mountains high and grand, valleys broad and fertile, rivers long meandering and deep, alive with fish of many kinds; she has a seacoast extending along the beautiful Pacific of more than nine hundred miles; she has mines of gold, that have produced more than a thousand millions dollars, and of silver, in quantities, that will in time, create a commerce of magnitude, far beyond that of the great mart of New York; she has grain with which to feed the poor of Europe; she has labor for willing hands, in the tilling of her ample soil; she has climate unsurpassed by any other country; she has virgin soil enough for millions of comfortable and happy homes, where the church and the school will have recognition; she has almost everything to make the truly industrious happy; she is an empire within herself, with a soil of great productive capacity, and as varied in capacity as can be found in the world; she produces in luxuriance all the semi-tropical fruits; she has a climate from the eternal snow of her glacial-peaked mountains, in the North, to the limpid-streamed semi-tropical valleys of the South; she has trees taller and grander than those of any other country, the wonder of tourists and travelers from all parts of the world; she has caves and caverns, precipices and chasms; she has walls of rock thousands of feet high, with polished and glistening sides, left by glacial action in the mighty Sierra Nevada, silent sentinels, for ages, guarding the wonderful Yosemite; she has water-falls, sparkling and bright, 'leap from an eminence of more than three thousand feet; she has geysers, that roar, foam and hiss, reminding one of pandemonium itself; she has rugged range of mountains, snow-capped and grand, admonishing man of his littleness in comparison to the inflexible law which spreads that sheet of eternal white over their mighty tops; she has barren and sandy wastes where only the cacti grow; she has fertile hills, where the grape is thrifty, from whose juice the sparkling wine is made, which for purity and body is nowhere excelled; she has the railroad, marching grandly up the mountain side of the Sierras, to an altitude of more than seven thousand feet, and over their summit to the sage-brush plains of the Humboldt beyond, and thence, the great Southern Pacific ploughs its way from San Francisco across the desert plains to Yuma, thence to Texas and the Gulf states; she has an area larger than all New England, New York, Pennsylvania, New Jersey and Delaware combined, in which

fruit, flowers and ice grow simultaneously; she has sons and daughters of high moral worth and intellect, whose future will be marked and bright, for they are taught the importance of industry; she has a city by the sea, of upward of three hundred thousands souls, representing every nationality, seven hilled, from whose port ships, wheat-laden, sail for furr-off and distant countries, the product of her generous soil, a result of willing industry; she has lakes, high up in her mountain fastnesses, with water sparkling and bright; she has coal, iron, lead and tin ready for all branches of manufacturing; she has everything required for the hardy sons of industry; she has no room or use for idlers; she exacts from all, energy, application and industry, and in return gives a generous reward; she has nuggets of gold, which are not to be picked up from her high-ways, they are hid away in the depths of her mountains, and come forth only at the call of those who labor; she invites to her shores, from abroad, all who wish to live in a climate, which, for evenness, is unequalled; she has room for millions of willing and industrious workers, tillers of the soil, who have not entered the mad races for quick fortunes, but are content with the comfort which patient toil insures; she gladly welcomes to her shores that class who believe in the school, the church, society, hamlets and villages, and who ignore the dissolute and idle; to such immigration, she extends the right hand of fellowship, while to that other class, she says, frankly, that there is no room for them, for the State is already over-populated with drones and fortune-seekers.

## THE COMING CONCLAVE

Our citizens, generally, are busily engaged in making the necessary and suitable arrangements for the reception and entertainment of the Knights Templars while they remain among us as our guests. From the responses already received, from many commanderies at the East, by the Committee of Arrangements, there is now sufficiently definite information to warrant the belief that, at least, 3,000 Knights Templar and, perhaps, double the number, will visit California on this occasion; and it is thought that the families of the Sir Knights, who will accompany them, will increase the number fully 50 per cent.; and will, in all probability, be the largest and most distinguished gathering of people that will take place in the Westernmost State of the Union for many years. The Triennial Committee, composed of representative Sir Knights of this commonwealth hold regular meetings for the purpose of discussing matters of interest relating to the success of the coming Conclave. Our coming visitors will be composed of a class of people that will be of incalculable benefit to our young State. They are the representatives of the very best elements of every department of industry and social life, whom it will be an honor to know and a pleasure to meet.

We anticipate an influx to the State after these visitors have returned and reported to their Eastern homes; and it is a safe calculation to make, that numbers of them will conclude to settle up their affairs, and return and make permanent homes in the State which they learned to like during their brief sojourn in it. This has been the case, in the past, with a large class of people who came to California with the view of only stopping in it a few months as a winter resort; and we see no reason why temporary sojourners, like the Sir Knights and their friends, will not pursue the same course. To our mind, there are sufficient reasons why many of them should conclude to make their future homes here. They will, as a rule, be composed of men possessed of considerable wealth, great foresight and sagacity. After visiting many places in California, will readily observe that there is more prosperity and rapid development of the resources of our State, in proportion to the number of its inhabitants, than can be found elsewhere, and conclude that there is no other community which can compare with the Golden State in point of climate, richness of soil, and natural advantages for great business enterprises. In our judgment, there is no other State that holds out so many inducements to immigrants with some means, strong hearts and willing hands.

Our visitors, in travelling over the State, will observe that since the discovery of gold it has been gradually filling up with an enterprising population; that great areas of land have been brought under cultivation and made to yield

golden harvests; industry and art, in multiplied forms, have made rapid strides of advancement; established cities and towns have given permanency in business and made comfortable homes. All that is needed is a fair and reasonable presentation of our varied resources and wonderful productions to convince capitalists, among the Sir Knights, who may visit us from every State in the Union, that no country in the world surpasses the Golden State.

The importance of this visit to our State, in the beneficial results that may flow from it, can not be overestimated. A better opportunity will, perhaps, never be offered California to make known abroad her advantages, and increase its population with worthy, wealthy and enterprising people. Every community throughout the commonwealth should make arrangements, for its own sake as well as for the State, by receiving and properly entertaining these distinguished visitors. They should spare no pains in showing them the natural resources and the developments which have been made in their respective localities. Whatever money or effort may be expended will bring a thousand fold return in the way of benefits, to say nothing of the satisfaction and pride every citizen must feel in having California make a creditable showing. On their return to their respective homes, the opinions expressed will have great weight, and, to a considerable extent, will affect future immigration. The reports that will be sent to the Eastern and European press will also have a pronounced effect. In short, this is a good opportunity to present California as she is. Let us do it.

**CALIFORNIA WOODS.**

Encouraging evidences of the intelligent appreciation of California woods multiply every year. Furniture is manufactured extensively in this city and other large towns of the State from these woods. It will be remembered that the furniture of the Palace Hotel of this city was made exclusively of woods grown here. We learn that in the largest countries of Europe, California evergreens are grown in public and private parks and gardens, and are greatly admired. Independent of the woods, chiefly valued for ornamental purposes, there are native woods, too numerous to mention, which are of commercial importance and bring high prices. Our lumber yards contain a great variety. Not long ago, a writer in some one of our interior exchanges, called the attention of people in want of business to the almost entirely neglected industry of wood-work in manufacturing articles of utility or ornament from the native woods of our State. This writer stated that there was quite a demand in the Atlantic States, among colleges and scientific institutions, and also with many individuals of culture, for simple rough pieces of wood specimens. He had sent many redwood chips through the mails. He adds, that there are innumerable little wooden articles now imported that ought to be made at home, and a surplus exported. They could be made of such beautiful and valuable woods as to entirely drive the common articles from market. Here, then, it would seem, is a chance for those who complain of having nothing to do. As showing how highly California redwood lumber is prized, we recently saw it stated that a lumber firm in Portland, Oregon, intends purchasing building material in California. The firm claims that it is cheaper to import a cargo of redwood from this State than to buy the best grade of lumber from local mills. This is high praise for our redwood lumber. It is virtually admitting that it is ahead of Oregon pine.

## OUR RAISIN INTEREST

Persons competent to judge believe that the raisin crop of California, the present year, will be from 200,000 to 250,000 boxes. Some of last year's raisins were much better than any ever produced in the State. Those which were exported met with a ready sale, and are pronounced to be of an excellent quality. It is now pretty well settled that California will soon be able to produce all the raisins required in the United States. Every year shows more clearly than before that our raisin interest must soon become one of very great importance.

Californians should feel a pride in a publication which is doing so much for the State as this journal is, and send it to their friends.

# DAIRYING IN CALIFORNIA

There is probably no other country in the world better suited for this business than our State. By what we can learn from experienced dairymen this is an interest, which, if followed systematically, even on a small scale, can readily be made to pay something over expenses. The facilities for carrying it on are so great in many counties, that it is becoming difficult to make special mention of any particular locality. Perhaps the foothills and mountain valleys, as they are generally well watered and surrounded by timbered hills, should be classed among the best sites for men of limited means. In such localities cattle have long ranges of excellent feed for a large portion of the year. Then again, there are localities in the large valleys where the business of dairying can be successfully and profitably pursued, on a large scale by capitalists who are looking for openings where they can invest money to a good advantage. Another great advantage is the fact that abundant supplies of alfalfa can be grown at a small cost, which will always secure stock against even a season of drouth. We might make mention of individual instances of those who have been successful by conducting this business for several years in San Luis Obispo, Marin, Humboldt, Sonoma, Los Angeles and other counties. The Swiss people, located in Sonoma, Mendocino and other portions of the dairying sections of the State, have been very prosperous. They are among the most industrious of our citizens. They pay high rent for land, when they do not own it, and, we believe, from what we have learned from reliable sources, that they conduct the business so successfully that it pays large profits annually. During the last few years this interest has developed to a large extent in California. We frequently see mention made of instances of men, who, ten or twelve years ago, began with very little means, that to-day own valuable farms. There is still room in the State for thousands of dairies, both large and small, where, with a little capital, industrious men may acquire good homes for their families.

General Shields, of Los Angeles, has, in years past, furnished the press of the State with many articles full of valuable information concerning alfalfa and the dairies of Southern California. In one of them, he states that alfalfa grows rapidly, summer and winter. Seven mowings may be made during the warmer, and two, during the colder months of the year. One ton and a half of dry hay per acre at each mowing is a low average yield, amounting to thirteen and a half tons per acre for a year. He says that there are not less than 200,000 acres of first-class alfalfa land in Southern California, exclusive of land devoted to wheat, fruit and corn culture. This area would produce 2,700,000 tons per annum. The General makes mention of many instances of those who are largely interested in the dairy business in that section of the State, that are realizing large profits annually.

Our State possesses a vast source of wealth in its pastoral resources, and we must bring these and other advantages properly before the world, if we would make them available by inducing immigration of the right kind.

## A GOOD AGRICULTURAL SEASON.

It is, conceded, by competent judges, that this is, taking crops and prices together, as good an agricultural season as the last one. In many places the grain is already harvested, and the yield is much better than was anticipated three weeks ago. The season is, therefore, a prosperous one. And this prosperity is not confined to agriculture; it relates to all the leading industries of the day. Mining is prosperous. Building, in all departments, is brisk. The demand for lumber has been active. Not only are building operations very extensive in this city, but there is a great deal of building in the country. The spirit of improvement has taken hold of the people. It almost invariably follows that when we have a good year agriculturally, we have a good season for mechanics, especially for carpenters and bricklayers. As soon as people acquire means they begin to make improvements in the country.

In a few weeks the annual fair of the State Agricultural Society will open in Sacramento city. It ought to be the best one ever held in California. It will be, if it is all in keeping with our agricultural resources. There never has been a time when the agriculture of this State was attracting so much attention as now.



# PIPER HEIDSIECK.

**SOLD EVERYWHERE.**

JOHN T. CUTTING & CO.,

Pacific Coast Agents.

## COUNTRY PROPERTY

—BY—

**W.M. BRANDON & CO.**

311 Kearny Street,

SAN FRANCISCO.

**\$21,000.** 35 ACRES BEST LEVEL FRUIT LAND, or garden land at Hayward; 70 acres in fruit, consisting of 828 apricot trees, 271 cherries, 291 pears, 70 plums, 30 apples, 16 peaches, also, chestnut and quinces; 65,000 currant bushes; fine grove of maple and poplar trees; elegant residence of 8 rooms with all modern improvements; English style; large barn and outbuildings, place well fenced, fine investment and a lovely home.

**\$12,000.** 165 ACRES FINE FRUIT LAND in the Vacaville warm fruit belt all fenced, 115 acres under cultivation, balance pasture and timber, good orchard, 3500 trees, choice fruits, 21 acres vineyard, fine varieties of table grapes, present crop worth \$4000, one-half of which is included in the price, payable in cash at commission merchants, in San Francisco, all necessary farming tools, 8 tons hay, 40 fruit boxes, one \$500 fruit wagon, house, barns, fruit-packing house, out house and sheds, two good wells and several springs of fine water.

**\$8,000.** TO EXCHANGE FOR CITY OR OAK-LAND PROPERTY. 100 acres in Sonoma county, 40 acres rich bottom land, 25 acres finest grape land, absolutely no frost, half the season's crop of grain and all the potato crop goes with the place, good timber, no underbrush, house of 5 rooms nearly new, house and barn supplied with water by pipes, exchange may be made for part improved, fine soil and balance on as easy terms as may be required.

**\$8,000.** TO EXCHANGE FOR CITY PROPERTY. Beautiful farm, 160 acres, three hours from San Francisco, and productive of a ton of grain to the acre this year, all rich, level loam soil, fenced and cross fenced, all in cultivation, nice family orchard, good new two-story house of six rooms, cellar and well furnished, fine parlor and bed-room, large barn and out-buildings, will include 8 head of good horses, 2 cows, 4 hells, 100 chickens, 1 new wagon, 3 sets double harness and 1 single gang plow, small plots and numerous other farming implements, carpenter and blacksmith tools, a lot of hay, etc., cheapest place in the market.

**\$7,500.** NAPA COUNTY, 75 ACRES RICH valley land, highly cultivated, 30 acres in vineyard, 30 acres wheat, 10 acres rich bottom soil, horses, cow, fowls and all necessary farming implements.

**\$4,000.** 62 ACRES, 2 MILES FROM NAPA, soil rich black loam, especially adapted for wheat or grapes, 13 acres of vineyard now on the place, vines 2 to 8 years old, house, etc.

W. M. BRANDON & CO.,  
311 Kearny Street.

## VISITORS,

From Abroad and the Interior

—CALL AND SEE—

THE LARGEST AND BEST

—STOCK OF FRENCH—

## BOOTS AND SHOES

IN SAN FRANCISCO,

Of Direct Importation, by Myself.

—ALSO—

A LARGE STOCK OF

**Kid Gloves and Silk Stockings.**

DIRECT IMPORTATION FROM  
PARIS.

A. KOENIG,

THURLOW BLOCK, 154 Kearny St., S. F.

### OVER-PRODUCTION.

We sometimes see it stated in our exchanges that a fear exists, to some extent, among farmers that their crops will, if they continue to be as good as they have been for the last season or two, become so abundant, soon, as to bring the price of produce to low figures in the market. Some are disposed to grumble, it is said, because of this feared result. We confess that we cannot understand this kind of grumbling. Well filled barns and larders, plenty of fat pigs and horses, cows and sheep, make happy, prosperous homes. A wise and prudent farmer can always turn his surplus farm productions into a remunerative channel. Let him, for instance, convert his corn into bacon, his hay, alfalfa and pumpkins into milk and butter. Let him raise chickens and eggs for market; in this way he can convert cheap products into those that will pay him a handsome profit. In our opinion, a community can never have too much of the substantial of life on hand. The farmer who pursues this policy will always have money in his pocket, plenty around his home, and be free of debt. Such a farmer will always prosper and live contented. The fears entertained and expressed by some of our friends in the rural districts sound a little ludicrous. Instead of having any such apprehensions concerning over-production, they should greatly rejoice at the prospects of abundant crops. They should diversify them in the way we have suggested. That any of the farming districts of California should import such articles as bacon, ham, cheese, dried fruits, etc., which, of necessity, have to be paid for from the proceeds of their local resources, indicates a want of thrift, and a lack of confidence in the productive industry which creates wealth. If left altogether to its own resources and debarrd from foreign importations, there would, in a short time, be a wonderful development in the home productions of California.

### THE INDUSTRIAL FAIR.

The Eighteenth Industrial Exhibition of the Mechanics' Institute will open in the new pavilion, on Larkin Street, on Tuesday, September 11th, and closes on Saturday, October 13th. It promises to be one of the most noteworthy expositions of California industries ever held, and it is already attracting the attention of business men in a manner that would indicate the liveliest interest on their part. This is sufficient warrant for predicting its success. The large number of visitors who intend to take part in the Triennial Conclave of Knights Templar, occurring in the latter part of this month, will naturally look to this Fair for much information regarding the products and industries of our State. Those who exhibit will have an extraordinary opportunity to show and explain their articles. For the first time in a number of years, the department of mineralogy will be represented by a well assorted collection of specimens, including examples of the most important ores and minerals found on the Pacific Coast. Every possible tangible evidence of our young State's producing capacity, embracing something in every department of labor, will be gathered together at the pavilion. For the first time have become a most important means of advancing the industrial improvements of the State. In short, it is a recognized fact that expositions are of immense benefit to all who have anything they wish the world to know about. Every convenience will be supplied for the comfort of visitors, and no pains will be spared to make this the most satisfactory exhibition yet held in California. Those who intend to be exhibitors are earnestly requested to lose no time in applying for space. All information may be obtained from our old friend, J. H. Culver, Esq., the indefatigable secretary of the Mechanics' Fairs for many years.

### ESTABLISHING HOMES.

The Shasta papers state that a considerable number of immigrants have recently established homes in the little valleys in that section, which are rapidly filling up with an industrious and frugal people. During the last week or two, several carloads of settlers passed through Sacramento going in that direction. This would seem to indicate that the opening of railroad communication through from Redding to the Oregon line is already attracting people to that part of the State. It is understood to be the intention of the railroad officials to reach the Oregon line within six months.

Subscribe for THE RESOURCES OF CALIFORNIA.

### WHEAT ON THE PACIFIC.

Under the above heading we take the following from a late issue of the *Commercial Herald* of this city:

California this year will be the banner wheat State of the Union. Its yield will, almost to a certainty, approach seventy millions of bushels. This will sell, taking the whole year through, at an average of not less than \$1.60 per cental, or 96 cents per bushel. The average yield will be not less than twenty bushels to the acre, but it will reach in places as high as thirty, and in others as high as seventy bushels to the acre. Compare this with the average yield of the Northern States not given by statistics at over thirteen bushels to the acre, and it will be seen at once what a great advantage California has over other States. Seven bushels to the acre at 96 cents per bushel makes quite a handsome profit for the investor. And there is no part of the State that is not in easy reach of navigation or of tide water; not like the Western States, which, however fertile their lands may be, have still thousands of miles over which wheat must be carried before it gets to a port.

We can raise in the Sacramento and San Joaquin valleys as much wheat as was raised in all the United States last year. If we add Oregon and Washington Territory, we can double the quantity. A thousand million bushels of the finest wheat in the world can be raised in these three Pacific Coast countries—that is to say at a low figure, a thousand million dollars for half a million farmers, and a large number of farm help in addition. In fact, if these broad acres of the Pacific were cultivated as they are in Great Britain, there would be room for just double the number of farm proprietors. And this is for wheat alone, no account being taken for vine, fruit, barley, oat or grazing lands.

### GRAIN ACREAGE FOR 1883.

The committee on Information and Statistics of the Grain Exchange has prepared a statement of the number of acres seeded to wheat and barley in each county in California for the last two years, with the actual yield of the same for 1882 and the estimated yield for 1883. The following are the figures of a few counties for the estimated yield of 1883:

In acreage of wheat sown, Colusa leads with 435,000 acres; followed by Stanislaus, 330,000; San Joaquin, 300,000; Merced, 180,000; Butte, 175,000; Tehama, 160,000; Napa stands twenty-fourth with 27,200 acres; and Lake has 8,421; Yolo, 130,000; Solano, 100,000; Sonoma, 100,560. The total estimated acreage is 3,145,026 acres. In estimated production Stanislaus heads the list with 3,500,000 centals; followed by Colusa, 3,500,000; San Joaquin, 2,750,000; Butte, 2,600,000; Merced and Tehama, 1,700,000. Napa is twenty-fifth with 245,000 centals; Lake is given 125,000; Solano, 1,200,000; and Sonoma, 980,000. The estimated total yield is 81,842,600 centals. In barley Alameda leads, being accredited 1,100,000 centals, or almost double that of the next highest county, Monterey. Napa is given 1,200 acres of barley with an estimated product of 5,000 centals. The totals compare with those of the previous year as follows:

1882, Wheat.....	2,939,139	72,507,672
1883, Wheat.....	3,145,026	81,842,600
1882, Barley.....	679,006	7,141,140
1883, Barley.....	902,611	8,778,500

### COMING TO CALIFORNIA.

The Rocky Mountain News says that the question of emigrating to California is being discussed by a large number of people in Colorado, and colonies are being formed. An enthusiastic meeting was held in Denver a short time ago. Let them come, we can accommodate them; California is large enough and rich enough to support ten millions of people.

### A NOTABLE WHOLESALE LIQUOR HOUSE.

Lilienthal & Co., No. 160 Front Street, have on hand, by direct importation, a large stock of liquors, which they offer to the trade at low prices and on favorable terms. Regarding their whiskies, wines and brandies, there is but one opinion among connoisseurs, namely, that they are at least fully equal to the best to be found in this market. We advise those who wish to purchase anything in this line to give Lilienthal & Co. a call, as they are worthy of the confidence of their patrons.

### BRICKS.

The brick yards of Los Angeles put out about 120,000 bricks a day, and builders draw on them for about 100,000.

### THE FOOT-HILL LANDS

There is much more good land in the foot-hills of Nevada county than the county is given credit for, there being numerous valleys that will produce barley, oats, grasses, alfalfa, vegetables and fruits, and on these lands or on the higher slopes the grape is cultivated with great success. Some of these valleys have more or less of a rich, black loam, that is especially adapted for vegetable gardening, while the uplands show more or less of a decomposed granite soil, which is well adapted to grain. The country is sufficiently well timbered with white oak, and pine, for the uses of the settler, but not for building purposes. A great deal of this land is occupied, originally held under settlers' titles, but is being gradually secured by patents from the General Government, or from the Central Pacific Railroad Company, whose grant of the old section covers a considerable portion of this region. It cannot be said that this foothill country will rival the valley region in its general farming capabilities, but for the grape and fruit culture it is equal, and none the less a inviting field for the industrious men. It is a country that is steadily filling up with a good population, and the changes which have been made in the character of enclosures and fences, and the extent of the enclosures is very marked in the last few years. It is a very beautiful region, as well as picturesque in its physical features, and at this season of the year affords a most delightful prospect to the eye of the traveler. This country, which embraces all of the western and southwestern portions of the county, and embraces about six congressional townships, is almost exclusively adapted to the purposes above stated, and for cattle and sheep grazing, and is gradually growing in population and importance, and will continue to do so in the future.—*Grass Valley Union*.

What the Union says of Nevada county foothills is equally true of those of the county of Butte. The quality of the lands is the same, and so is their adaptability to the growth of the products mentioned in the above extract. Large tracts of the foot-hill lands of this county are held by parties whose only title to the same is a brush inclosure, and this title is not valid in law. But there is also considerable land in Oregon, Bidwell, Ophir, Wyandotte, Oro, and Mountain Spring townships, which is still open to settlers, without the necessity of breaking down brush fences. There is hardly a quarter section among the foot-hills of this county that does not contain more or less land suitable for orchards, vineyards, and gardens, and upon which a man could not raise hay enough to keep a few cows and a sufficient number of horses to do his work. Lumber can be obtained by going a short distance into the mountains, at very reasonable prices; and all the farm products in excess of the wants of the family can be marketed at remunerative rates. These lands are mostly under the different irrigating canals, the water of which can be used for the purpose when needed. Springs are numerous, and good water is the rule. Of course, big returns cannot be expected at once, but an industrious man can make a comfortable living, and save a little money from year to year, without the cares and anxieties incidental to farming in the valley.—*Oroville Mercury*.

### EIGHTEENTH

## Industrial Exhibition

OF THE

## MECHANICS' INSTITUTE

WILL OPEN TO THE PUBLIC

TUESDAY..... SEPTEMBER 11, 1883,

AT THE

**NEW PAVILION,**

Larkin, Hayes, Polk and Grove sts.,

And Continue until October 13th.

A Comprehensive Display of Pacific Coast Products, Mechanical Progress, Art, Agriculture and Horticulture will be fully represented in the Grand Mechanics' Pavilion.

P. B. CORNWALL, J. H. CULVER,  
President, Secretary.



## SISKIYOU COUNTY.

[CONTINUED FROM ELEVENTH PAGE]

The gold mines, both placer and quartz, are among the first in the State. In early times they were confined to the head of the creeks, and the development of even these claims were greatly retarded by the serious difficulty of traveling so long a distance from San Francisco, Yreka, the county seat, being 428 miles north. It is 75 miles by stage from Redding, but will soon be within bearing distance of the whistle of the iron horse, on the road between San Francisco and Portland, Oregon. Then mining machinery can easily be brought in for the development of the rich quartz ledges known to exist. In addition to gold, silver, copper, iron, coal, chrome and quicksilver are found in the county. The agricultural resources are becoming quite important. An increased acreage of land is being annually cultivated. The valleys of the rivers, especially the Klamath, Shasta and Scott's river, northern Siskiyou and the lake region, taken as a whole, contain many thousands of acres of fertile lands, all susceptible of cultivation. Fruits, vegetables and cereals all do well. The whole county is particularly well adapted to stock raising. Hay, for winter, is raised upon the meadows along the streams, while the hillsides are covered with bunch grass. The valleys afford good summer pasturage, but the fall of snow is heavy at this altitude. Large amounts of good Government land are not yet taken up. The mountains and hillsides are covered with forests of sugar and yellow pine timber, and will be a great source of revenue to this county as soon as the railroad is completed.

## Yreka.

The county seat, contains about 1,500 inhabitants. It is strictly a mining town, is 2,500 feet above sea level, and has a good, healthy climate.

## Fort Jones.

The second largest town, lies some eighteen miles south from Yreka. It has about 500 inhabitants, and is an important business center.

## Etna Springs.

In the same valley, is a thriving place of some 400 people. It is the headquarters for farmers, miners and the Salmon river freight.

## Sawyer's Bar.

Is a prosperous town. Several rich quartz mines are in the vicinity. There are a number of smaller villages scattered all over this mountainous county. The population in 1880 was 8,610, which would number fully 10,000 people at this time.

## SOLANO COUNTY.

Is one of the most important agricultural and fruit counties in California. It has no superior and scarcely an equal in the variety and extent of its soil. For early fruits and vegetables it stands first on the list, always sending to the San Francisco markets the first of every variety known and grown in Northern California. It is one of the smaller counties of the State, having an area of 576,570 acres. Railroads traverse the entire county in various directions.

The census of 1880 gave Solano a population of 17,480, which has increased rapidly within the past two years, and we may safely count an 20,000 people within her borders at the present writing. Two-thirds of the land in the county is being cultivated. About 50,000 acres are swamp and overflow lands; fully 10,000 acres of this are mud flats, left bare at low tide, and about 45,000 acres are partially reclaimed and fitted for agricultural and grazing purposes. Montezuma hills occupy the southeastern portion of the inland of the county. The northern and eastern parts of the county, embracing about 200,000 acres, are a level, fertile plain. Pleasant valley is located in the southwestern portion of the county, north across the entire county. This little valley is noted for its peculiar, genial climate, being free from frost.

The Assessor has classified the lands of Solano county into five grades. The first, of about 40,000 acres, is the very best quality of vegetable and fruit lands, and, in point of richness and productiveness, cannot be surpassed in the State. The second comprises the best quality of grain land, of about 220,000 acres. The third, a lower grade of farming land, includes the swamp and overflowed lands, with an area of 220,000 acres. The fourth grade comprises the partially reclaimed swamp lands, being of an alkali soil, and constitute about 75,000 acres. The fifth grade, of 100,000 acres comprises the swamp and overflowed (unreclaimed) lands, and the high mountain ranges, unproductive, as yet, except for pasture.

## Vallejo.

Contains about 6,500 inhabitants. It is the terminus of the California Pacific Railroad, and the city, which extends up to North Vallejo, connects with all trains over the Central Pacific and Southern Pacific railroads, on the opposite side of the Straits of Carquinez.

## Benich.

Has a population of 3,000. The Central Pacific Railroad Company have recently built their main trunk line through this section, crossing the straits on their monster steamer "Solano," the largest ferryboat in the world. Baker & Hamilton have established the largest agricultural works on the Pacific coast here.

## Solano City.

Has a population of about 1,200. About one-half mile west is

## Fairfield.

The county seat, a small place of 600 inhabitants. The fourth town, in point of population, is

## Dixon.

It has about 800 inhabitants. The next largest town is Yacaville, in the western portion of the county, and situated in one of the best fruit and grain sections of the State. Rio Vista has a population of about 800. Elmira has 350 inhabitants.

## SONOMA COUNTY.

The area of Sonoma county is 850,000 acres, and the present population is 25,000. The natural curiosities of Sonoma are remarkable, such as the world-famed Geysers. Litton Springs are another curiosity, where better water is obtained. White Sulphur Springs, Skaggs's Springs, Mark West Springs, Alder Glen Springs, all have different medicinal qualities. The coast of Sonoma valley, and separated from it by a low range of mountains, is the main grain valley of the county, running from San Pablo bay in a northwestern direction the entire length of the county. The southern portion of this large and fertile plain is called Petaluma valley, the central portion is known as Santa Rosa valley, and the

northern portion as the Russian river valley. Besides these there are several other extensive valleys. No more diversified soil can be found in any county than Sonoma possesses. Fruit and other crops thrive here. And no other county in California, with so much fine agricultural land, has such immense forests of timber. At Guerneville, twenty miles northwest of Santa Rosa, and at the terminus of the S. F. & N. P. R. R., we come right into the heart of the redwood country. Here are found extensive saw-mills, producing from 12,000,000 to 15,000,000 feet of redwood lumber annually. Russian river is the largest stream in the county.

## Santa Rosa.

The county seat, with a population of 4,700, is situated in the center of the valley, on the S. F. & N. P. C. R. R. It possesses colleges, fine water works and several street railways.

## Petaluma.

Numbers 4,500 people. It has excellent drainage, and its streets are well graded. It is well watered by the Sonoma County Water Works, and is lighted with gas.

## Healdsburg.

Has a population of 2,000. It is one of the finest in the State, and no better land can be found in any county than in the vicinity of Healdsburg. The uplands cannot be excelled for fine grapes and excellent fruits.

## Sonoma.

Sonoma's early history dates back to 1835, when it was laid out by General Vallejo, who is still living here. Sonoma valley is about 50 miles due north from San Francisco, and is one of the most eligible points for a country residence. Its soil is most fertile and highly productive. Its climate is very equable and healthful. The Sonoma Valley Railroad is now completed from Sonoma. Landing into the valley for a distance of fifteen miles. The entire valley is taken up with vineyards. Sonoma valley is from eighteen to twenty miles long, and from one to six miles in width. There are about 600 people, of nearly all nationalities.



VERNAL FALLS, YOSEMITE VALLEY.

## Cloverdale.

At the head of Russian river valley, is the terminus of the S. F. & N. P. C. R. R. It has a population of 800.

Fulton is the junction of the S. F. & N. P. C. R. R., and the Guerneville branch.

## Guerneville.

One of the liveliest towns in California for its size, has four extensive saw mills, which cut and ship about 12,000,000 feet of redwood lumber annually. Ten miles further west, at the terminus of this railroad, and at the mouth of Russian river, are

## Duncan's Mills.

Producing large amounts of lumber annually. We make the following estimate of standing redwood yet in Sonoma county: In the vicinity of Guerneville, 100,000,000; Occidental and vicinity, 25,000,000; Duncan's Mills 75,000,000; headwaters of the Gualala, 150,000,000; total, 325,000,000 feet. Summing up Sonoma county, as a whole, we must say it is one of the finest counties in California.

## STANISLAUS COUNTY.

Has an area of 924,500 acres. The soil of the east side is of a sandy nature, verging to a loamy character as the foothills are approached. The soil of the west side is a rich loam of indefinite depth, and, with an abundance of moisture, yields large crops of cereals. The large average yield, in favorable seasons of abundant rainfall, is an indication that when, in the future, a system of irrigation is inaugurated, by which these lands may be plentifully watered, their productiveness will insure the most bountiful returns. The valley lands, which comprise the greater portion, and which have a gentle, uniform slope, favorable to irrigation, are generally in a position to be well watered from the Stanislaus and Tuolumne rivers, and on the south from Tulare lake. The San Joaquin canal, on the west side, now irrigates some 20,000 acres, and is intended to be carried on down through the county in the near future. This is an excellent opening for fruit culture.

The Southern Pacific Railroad passes through the central part of the county, from San Francisco to Los Angeles.

## Madera.

The county seat, is on the line of the S. P. R. R., 133 miles southeast from San Francisco. It was laid out in the fall of 1870, and possesses a population of 2,300.

## Oakdale.

Contains 950 people. Oakdale is the shipping point for most of the freight and travel to Tuolumne county, which is here transported to teams.

## Turlock.

In the southern portion of the county, on the line of the S. P. R. R., is the central point for a large scope of fertile country.

## Lodi's Ferry.

Has a population of 350, and is surrounded by a large section of fine agricultural country.

## Knight's Ferry.

The former county seat of Stanislaus county, is located in the foothills, on the Stanislaus river, near the eastern boundary of the county, and is the shipping point for large quantities of wheat. The population of Stanislaus county is 10,000.

## SUTTER COUNTY.

The Sacramento River forms nearly the whole of the western boundary, while the Feather River, after forming nearly two-thirds of the western line, flows through the southern part of the county into the Sacramento. The facilities for navigation and irrigation are unsurpassed, the Sacramento being navigable at all times of the year. So is also the Feather, as far as Yuba City, the county seat. The Bear River, quite a considerable stream, flows through the southern part of the county before it empties into the Feather River.

The Buttes, a collection of mountain peaks, situated in the northern part of the county, rising to a height of 1,000 feet, occupying an area of four by twelve miles, constitute the bulk portion of Sutter county, the balance of its territory being all level, and most of the soil in the county is a rich, black loam. A large portion of the area of Sutter county is a good land productive agricultural land as there

## Tehama.

The second town in the county, has a very pleasant location on the west bank of the Sacramento, and at the junction of the California Pacific Railroad and the O. V. of the C. P. R. R., 12 miles south of Red Bluff. It has a population of 700. The other towns are: Antelope, Butte Meadows, Coal Range, Casale, Copeland, Cottonwood, Elder Creek, Elk Grove, Elmira, Elkins, Floyd, Gleasonville, Henleyville, Howell, Hunter, Johnson, Livery, Live Oak, Lagoon, Moor's Ranch, Montgomery, Mirrey, Oak Creek, Riceville, Rawson, Reynolds' creek, Red bank, Stony creek, Janna, Thomas, Vina and others. The population of Tehama county, in 1880, was 9,300, but, at present, it would amount to 10,000.

## TRINITY COUNTY.

Contains an area of 1,680,000 acres. Gold mining is the chief support of the county; the gold shipped annually from this county amounts to nearly one million dollars. The population of the whole county is only 4,998, nearly all miners. There are many prosperous mining camps in the county.

## Weaverville.

The county seat, and one of the prettiest little towns in the mines, contains 750 inhabitants. It is surrounded by many fine orchards, the fruit of which attains an excellent flavor in this locality.

## Trinity Center.

On the stage road from Shasta to Yreka, is the second place of importance. The valley has a number of good farms, the produce of which finds ready sale at home to miners, teamsters, and travelers. There are good paying mines in the surrounding hills. Hayfork valley is an important farming region, and there are a number of good farms along the Hayfork and the smaller streams emptying into it. Indian Creek is a mining camp at the head of this stream, on the dividing line between Shasta and Trinity. There are some good paying quartz ledges in the vicinity.

## Douglas City.

Is the central point for a gold mining region. Lewiston is also on the Trinity, eleven miles above Douglas City. The Deadwood quartz district is in this vicinity. Minersville is on the east fork of Stewart's Fork of the Trinity river, in one of the best gravel mining districts in the county. Conbar, or Altoona, is the most northern settlement in the county, and is a small place. It is in the quicksilver mines, which are now only partially worked, on account of the metal. Junction City lies southwest of Weaverville, in a good paying mining district. North Fork is some eight miles below Junction city, in a good mining district. Cox's Bar lies ten miles below North Fork, surrounded by rich gravel claims. Martinville is in the northwestern portion of the county. New River and Rutland are small settlements, easily accessible to pack trains. Canyon City, on a creek of the same name, is nine miles from Junction City and 18 from Weaverville, in a good mining district. The most serious drawback to the county is its long distance from a market. Weaverville is 218 miles north and west from Sacramento. The route is by rail to Redding, and from thence the distance is 180 miles by stage. The mountain wagon roads are usually good. Trinity has considerable good saw timber, and very fair agricultural land open to settlers.

## TULARE COUNTY.

Has an area of 4,000,000 acres. Tulare belongs to the great San Joaquin valley. About 2,000,000 acres are mountain, the highest peaks of the great Sierra range fringe the eastern border. Mount Whitney, 15,055 feet high; Mount Williamson, nearly the same height; Mount Tyndall, 14,396; Mount Kaweah, 14,000, and others exceeding fifty in number, of over 13,000 feet above sea level, are grand sentinels of the Sierras, towering above all other lands in the United States. About 1,000,000 acres of the county is broken land, with small, elevated valleys, susceptible of settlement, where the herdsmen keep their flocks of sheep and cattle in summer.

The Visalia land district embraces Fresno, Tulare and Kern counties. These counties comprise a great level valley, with the Sierras on the east, and the Coast Range on the west. They contain more than 500,000 acres of level land, and upwards of 2,500,000 acres of mountain and foothill land. Through the center of these counties runs the Southern Pacific Railroad. The odd-numbered sections of land, for twenty miles on each side of the road, belong to the Railroad Company. The even-numbered sections of Government land, within these limits, are held at \$2.50 per acre. The Government lands, outside of these limits, are \$1.25 per acre. None of the Government lands are subject to private entry; they can be obtained only by pre-emption and homestead settlers. There is more or less vacant Government land in almost every township in the district, amounting in the aggregate to many thousand acres. A large portion of these vacant lands are good, and are capable of producing, with proper cultivation, all the products of the soil of the temperate and semi-tropical zones. Much of these vacant lands are as good in quality as private lands in the district worth \$25 per acre, but these private lands have been increased in value by cultivation and means of irrigation. Facilities are at hand to make the public lands equally valuable.

## Visalia.

Has a population of about 2,000 and lies 230 miles southeast from San Francisco, and 8 miles east from the Southern Pacific Railroad, but is connected with a great thoroughfare by a private railroad from London. Visalia is beautifully located on one branch of the Kaweah river, and groves of evergreen and deciduous oaks, which ornament the country for miles on every side.

## Hanford.

The second largest town in the county, is situated in the famous "Musel Slough" country comprising the finest body of agricultural land in the county. It contains 900 inhabitants. The largest town in the county is

## Tulare City.

Located on the main line of the Southern Pacific Railroad and the terminus at the northern division. Extensive shops for the repairing of locomotives are located here, furnishing employment for a population of about 800. The town has a population of about 800.

## Georgetown.

Is located in an excellent grain and fruit producing country. The land here is all irrigated, and produces large crops annually. The town contains 150 inhabitants.

## Red Bluff.

Is pleasantly situated in a fine farming country, and has a population of about 3,500.



The other towns of the county are Lamorn, Porterville, Goshen, Farmersville, Woodville, Grandview, Placer, and Tipton, the two largest being Lamorn and Porterville, which have a population of about 200 each. The capabilities of this county for supporting a large population are remarkable. Here are immense forests of timber.

#### TUOLUMNE COUNTY.

Mines and mining are the principal interests of the county. The Excelsior, Riverdale, Buchanan, Goshen Gate, and Santa Monica are all large mines. A network of quartz veins threads the granite and slate ranges, hundreds of which are yet unprospected. Among those that are being worked, few, if any, are fully developed. There are fully 500,000 acres of good, tillable land, open to settlement.

#### Sacramento

Has about 1,400 inhabitants, and is reached from San Francisco by rail (by way of Stockton), in Oakdale, the terminus of the Copperopolis road, and from thence by stage a distance of 35 miles; the total distance is 157 miles west of San Francisco. There are a number of good paying quartz mines in operation in this vicinity.

#### Columbia

Contains 500 inhabitants. Chinese camp, eight miles south-east from the county seat, has 400 inhabitants. Some fifteen miles east is Big Oak Flat and Garato district, and rich and extensive mines. Fruit-raising, to which the soil is adapted, is one of the growing interests of the county. Semi-tropical fruits and vines are cultivated, and raising grapes do remarkably well in the valleys and foothills. The area of the county is 1,250,000 acres. Forty or fifty thousand acres might be cultivated to fruits, vines, and cereals. The population of Tuolumne, in 1880, was 7,818, but would reach about 8,000 at present.

#### VENTURA COUNTY.

Has an area of 1,206,000 acres. The San Rafael range of mountains form the northern line, the Fernando and Santa Susana. The county is well watered.

The principal valleys are Simi, Los Posas, Santa Clara, Pleasant, Ohi and Nornduff. Frost and snow are seldom seen, and little irrigation required. Los Posas is, perhaps, the best in the county, and its lands are all tillable. Santa Clara has an extreme length of about 50 miles, and measures about 25 miles in its widest part, and lies along the Santa Clara river. Its lands are good and well watered. Irrigation is but little needed; artesian water can be obtained at less expense here than in any other part of the State. Nordhoff valley is about 22 miles long and 14 in width. Through it runs the Ventura river, in a winding course, to the sea. The oil of Ventura has scarcely been touched. The time is not far distant when this will be one of Ventura's greatest revenues.

#### San Buenaventura.

The county seat, is situated on the sea-shore near the mouth of the Ventura river. The site is adapted, by nature, for the building up of an attractive and imposing city. Looking eastward we could see the broad valley of the Santa Clara, cov-

ered with waving green fields. Turning north, up the valley of the Ventura river, is a fine wide avenue leading out of town with fine orchards and well cultivated gardens and residences of some of Ventura's wealthiest citizens.

#### Hubert

Is situated on nearly level ground, almost touching the sea. This is considered one of the finest agricultural sections in the State. Between San Buenaventura and Newhall, in the Santa Clara valley, lies the second largest town in the county. Santa Paula, surrounded by orange orchards and grain fields, the village has 200 inhabitants.

#### Nordhoff.

A famous resort for pleasure seekers and invalids is reached by daily stage and is located about 12 miles from San Buenaventura in what is known as Ojai valley. It is beautifully situated between the Ventura river on the west and San Antonio creek on the east.

#### Saltrey

Is the center of a magnificent agricultural country. Ventura county also boasts of several good mineral springs, which are frequently visited by invalids. There are many thousand acres of government land, mainly in the mountains. There are numerous little valleys scattered through the mountains where sheep men keep their flocks.

#### YOLO COUNTY.

Some 80 miles north and east from San Francisco, is one of the finest agricultural sections in all California, the great Sacramento river forming its entire eastern boundary. This is a prosperous and beautiful county, with an area of 650,000 acres. The larger portion occupies one of the most fertile sections of the Sacramento valley. Land is yet quite reasonable in price in this vicinity. The country all along the eastern slope of the Coast Range, known as foot hills, has numerous little valleys, which is the choicest fruit land in the State, while the mountain ranges are mainly held by possessory title. The population, in 1880 was 11,161, and at present would reach 11,500. Grapes, for raisins and wine, are extensively cultivated. Some of the finest raisins in the San Francisco market come from Yolo county. The shipping facilities of the county are excellent; first, the Sacramento river, along the eastern side of the county, where boats ply up and down.

Railroads run in different directions. The California Pacific extends across the south-eastern portion of the county, with a branch to Davisville, north, to Kati's Landing on the Sacramento; the main line runs north through the county, by way of Woodland, up into Colusa. Along the western portion of the county is the Van Valley & Clear Lake railroad, now completed from Elmira, by way of Vacaville and Winters, to Madison, the present terminus. This road will doubtless be extended to Capay valley, with the intention of going up the valley into Lake county. Thus it will be seen that Yolo is very centrally located.

#### Woodland.

The county seat, is beautifully situated on a level plain, at the junction of the California Pacific and Knight's Landing branch. The town is regularly laid off, with broad streets, which run at right angles. The place is well supplied with artesian

water. The second largest town in the county is Winters.

In the south-western portion of the county, where the earliest fruits come from. The land is all fine farming land around here, Winters being just on the edge of the foot hills. The town has a population of some 500, supported by agriculture and fruit culture, the products being all shipped to San Francisco, and command the highest prices, on account of being early in the season.

#### Davisville.

Is on the line of railroad between San Francisco and Sacramento, and at the junction of the road north. At present the town has a population of 400. Land in this vicinity is the finest kind of sandy loam and sedimentary deposit from Putah creek. Here are some of the finest orchards in the State.

#### Millerton.

The terminus of the V. V. & L. R. R., is located in a fine, level country, about four miles from the foot hills. Lonsville is situated in the lower end of the beautiful Capay valley. Knight's Landing is on the Sacramento river, and is the terminus of the road from Woodland.

#### Cachville.

Has some 250 inhabitants. There are a number of smaller towns and precincts in the county, such as Buckley, Black's, Clonowood Canyon, Capay, Clarksburg, Dunsmuir, Eureka, Enterprise, J. J. Jerson, Putah, Pine Grove, Willow Slough and Yolo.

#### YUBA COUNTY.

Has an area of 396,440 acres. It is but partially dependent upon its agricultural resources, and cannot be classed as an agricultural county. Less than one-third of the soil is susceptible of profitable cultivation; the remainder is devoted to grazing, and is rated as timber and mineral lands. The western portion of the county lies in the valley, and is chiefly devoted to wheat, barley, fruit and vegetable



Nevada Falls, 700 feet high.

farming. Large quantities of potatoes are raised along the Bear river bottom, in the southern portion of the county. There are, at present, four steam saw-mills in the county. From the best information we could get, while among the people of Yuba county a short time ago, we estimate the standing saw timber at 12,000,000 feet.

#### Marysville.

Is situated at the junction of the Yuba and Feather rivers, and has always been the seat of justice of the county. The commodities, substantial brick business blocks, the neat frame buildings, and the beautiful abated streets all give the city an appearance of having been long established. Few towns in California have suffered more from conflagration and flood than Marysville. It has at present a white population of 5,000.

#### Wheatland.

Is a shipping point for grain, hay, vegetables, potatoes, etc. The town is in the center of the finest agricultural portion of the county. Wheatland has a population of 650.

#### Cumtounville.

Up in the mountains, in the eastern part of the county, is an old mining town, which had its rise with the opening of the mines in 1852. The town still enjoys a fair local trade, and possesses several stores and a good hotel, where all stages stop. The town has a population of about 300.

#### Southville.

Is located on the upper Yuba, eighteen miles above Marysville. The other towns in the county are Strawberry Valley, Brownsville, Greenville, Tumbucto, Sucker Flat, Rosa Bar, etc. Yuba county had a population of 11,270 in 1880, and it has about the same at the present writing.

#### BIG NUGGETS.

A few days since Charles Phelps found in his hydraulic claim at Washington township, some nuggets the sight of which would make a forty-winner feel homesick. There are three of them varying in value from \$100 to \$100 each, and they are worth in all between \$400 and \$500.—Nevada Transcript.

## THE ACCIDENT INSURANCE COMPANY

OF NORTH AMERICA.

ORGANIZED, A. D. 1872.

President... SIR A. T. GALT, G. C. M. G.  
Vice-President... HEN. JAMES FERRIER,  
Managing Director... EDW. RAWLINGS.

HEAD OFFICE, MONTREAL, P. Q.

### IMPORTANT

-TO-

## Commercial Travelers AND MERCHANTS.

The new form of Policy issued by this Company grants permission for TRAVEL TO AND RESIDENCE IN EUROPE AND MEXICO WITHOUT EXTRA CHARGE.

The following condition, SO OBJECTIONABLE TO COMMERCIAL TRAVELERS, and heretofore found in all Accident Policies, is not contained in this Policy, viz: "Standing, riding or being upon the platform of moving railway cars, other than street cars, or riding in any place not provided for the transportation of passengers \* \* \* or being on the bridge of any railway or hazards not contemplated or covered by this contract. And no sum will be paid for loss of life or disability (in consequence of such exposures) happening to any person other than employees, who shall have given notice of such occupation, and paid the fixed premium for such hazards."

IN EVERY RESPECT THIS POLICY IS THE BEST EVER ISSUED.

Call at our Office and Examine before you take or renew a Policy elsewhere.

The record of this Company is also unequalled. Not a single contest at law since its organization in 1872.

## H. D. IRWIN & CO.,

General Agents for the Pacific Coast.

405 CALIFORNIA ST.,

SAN FRANCISCO, CAL.

JOHN T. TOY, - - - City Agent

E. J. COLEMAN, J. BENLY SMITH,  
President. Vice-President.

## PACIFIC TRANSFER COMPANY,

Checks and Weighs Baggage at Hotels, Residences and Office of the Company; Transfers Trunks, Merchandise and Parcels from one part of the city to another; Transfer Wagons deliver Baggage from all In-coming and to all Out-going Trains and Boats.

FREIGHT DELIVERED OR SHIPPED PROMPTLY WHEN BILLS OF LADING OR ORDERS ARE LEFT WITH, OR CONSIGNMENT MADE TO, THE COMPANY.

Carriage and Coach Tickets sold on all Trains and Boats, by the Messengers of the Transfer Company as Agents of the United Carriage Company.

GIVE YOUR BAGGAGE CHECK TO AGENT ON EVERY TRAIN.

Office, 110 Sutter Street,

OPPOSITE LICK HOUSE,

SAN FRANCISCO, CAL.

# FIREMANS FUND



OF CALIFORNIA.

Capital, - - - - - \$750,000.  
Assets, - - - - - \$1,384,026.

#### HOME OFFICE:

Southwest Corner of California and Sansome Streets,  
SAN FRANCISCO, CAL.

### The Firemans Fund Insurance Company

Bases its claims to patronage upon its being the OLDEST PACIFIC COAST FIRE INSURANCE COMPANY; upon ITS RESOURCES, being the LARGEST PACIFIC COAST INSURANCE COMPANY; upon its LOSS-PAYING RECORD, having paid FIVE MILLION DOLLARS for losses during the past Twenty years. And its popularity is attested by the fact that its PREMIUM INCOME is GREATEST OF ALL THE COMPANIES ORGANIZED WEST OF NEW YORK STATE.

D. J. STAPLES, President.  
ALPHEUS BULL, Vice-President.

W. J. DUTTON, Secretary.  
E. W. CARPENTER, Asst. Secretary



# METHODS OF REDUCTION FOR COPPER ORES.

In the reduction of copper ore various systems have from time to time been adopted, the method being subject in part to the character of ore worked and general existing conditions. For many years the business of smelting copper ores has been carried on almost exclusively at Swansea, South Wales, near the mines of Cornwall and Devon, ores being shipped to this point from all parts of the world. Until the past decade but little was known of the great resources of the Pacific States and Territories in copper. Some developments had been made in various parts of the country of a most promising nature, and much money spent in reduction works, based upon former methods of working, but the attempt to introduce the systems and practice of the old world in the new, to this as in many other things, was attended with disastrous failure. The new conditions were not suited to the old order of things.

In this emergency Messrs. Baskin, Brayton & Co., of the Pacific Iron Works in this city, a firm representing the most advanced ideas of modern practice in everything relating to the mechanical appliances for treating ores, conceived the idea of applying the principle of the Water Jacket Furnace to the reduction of ores, and instituted a series of experiments, with a view of determining what form of jacket was best adapted for the purpose, as well as the mechanical construction necessary to withstand the severe order that such work would be subjected to. After some years of persistent and costly experiments, a result was reached which has made a revolution in the methods of copper reduction, and which has created an industry that has been a source of vast increase in the wealth of the country.

It is an exaggeration to say that the extraordinary development of the copper interest in all our mining States and Territories owes its origin and present progress to the invention and general introduction of the Pacific Copper Smelter. This furnace has revolutionized all former methods, and made practicable the treatment of all classes of copper ores by a single process, so simple in operation and so economical in results that there is scarcely a copper mine anywhere, located favorably as to fuel and transportation, that cannot now be profitably worked. Every successful copper enterprise in the country, without an exception, we believe, is being operated by this method of reduction. The manufacturers are now receiving orders for their smelters from nearly every mining country in the world, and the system seems likely soon to become universal. The same system of reduction, it may also be said, has been applied with equal success to all grades and classes of gossier ores.

## A BOOM FOR YOLO.

It does not need a prophetic eye to see that in the near future Yolo county is to experience a veritable boom. The fact is becoming widely known that as far as productive land and a healthful climate are concerned, Yolo county is second to no locality in the State. Negotiations are now in progress by a syndicate of capitalists for the purchase of the Wilcoxon tract of a little over 2,000 acres, situated on Cashe creek, about two miles from Woodland. If the parties succeed in their endeavors, the tract will be divided into small lots of from 5 to 20 acres, and sold to actual settlers. The whole tract can be irrigated by the Moore ditch, and is one of the most picturesque as well as one of the very richest tracts of land in the State. The street railroad, for which a franchise was granted by the Board of Town Trustees, will very likely be continued out to the colony, and will greatly enhance the value of it. Our county is only yet in its infancy, and those who invest in real estate here now are among the wise.—Yolo Democrat.

## FOR SALE.

### A FINE RESIDENCE

—OF 16 ROOMS, ON—

Chy St., bet Franklin and Gough.

Also one of 9 rooms on Folsom street, between Twenty-first and Twenty-second.

Twelve lots in Bay View Home-stand Association.

Lot on Twenty-seventh avenue, adjoining Point Lobos road; 70x120 feet.

One hundred and fifty thousand acres land in Tom Green county, Texas.

## 5,000 ACRES

Alfalfa, Orchard, and Vineyard Land

—IN—

## FRESNO COUNTY,

—NEAR THE COUNTY SEAT—

At \$10 Per Acre.

For particulars apply to

ROBERT PERRIN,

402 Kearny Street, - San Francisco.

## GROWING APPLES.

A correspondent of an Eastern journal recently remarked that Southern California was coming forward with apples so fine as to challenge the admiration of all beholders. On this subject the Santa Ana Herald recently said:

As large and finely-flavored apples are now raised in the Santa Ana valley, particularly in the Newport district, as can be found anywhere in Oregon. A quantity of apples were exhibited here, some months since, grown by Mr. J. H. Moehrer, of Newport, which would have made an Oregon man turn green with envy. There will be a time, if it has not already arrived, when an apple orchard of choice trees will pay full as well, if not better, than an orange orchard. We believe in diversified fruit culture, as well as agriculture. It is a mistake to put one's land into one product alone, as all experience has shown the fallacy of such a course. It is a fatal mistake. It has been conclusively demonstrated that the Santa Ana valley will grow as fine deciduous fruit as any part of the country, and there is always a market for good fruit and always will be. The failure of the apple crop in many of the Eastern States, and not only the failure of the crop but the destruction of the trees by the severe weather, will make it possible to ship our fine apples to Eastern markets with good profit. Large quantities of fine apples, the product of our valley, have been shipped into the Arizona market the past season, and probably brought a fair profit. The finest kind of apples, apricots, peaches, pears, prunes, plums and figs, in addition to all the citrus fruits, find in the Santa Ana valley their congenial home, and it would be well for all those engaged in fruit culture, or those who intend



The Sentinel, Calaveras Grove.

to engage in it, to consider the advisability of diversifying their products. We are satisfied that it would pay better.

## A DISTINGUISHED VISITOR'S IMPRESSION OF CALIFORNIA.

Gen. Albert Pike, who is now visiting our State, recently said, in the course of an interview with the editor of the *Examiner*, that "with the utilization of the great lakes and other water resources of the Sierras, California is capable of a development now undreamed of. She will be equal to Egypt—yes, a half dozen Egypt. Every foot of land in the San Joaquin Valley will receive continued fertility, and yield the heaviest crops. The development of this country must remain comparatively scanty until your incomparable valleys are fattened by the copious and unfailing water supply ready to pour down upon the inviting plains at the solicitation of energy, skill and capital. It will be done, too. There are untold fortunes in these enterprises. I was born fifty years too soon. I would like the pleasure of seeing and taking some part in the grand things that are to be accomplished within the next half century. Water will do astounding work on this coast. Sometime the Government will make Do Lesseps' incision through Lower California, and run the waters of the Pacific into the great Arizona desert. The climate of that region, through the conversion of that terrible sand-waste into an inland sea, would be all changed, and the country would be moist, rainy and fruitful."

## LOUISVILLE EXPOSITION.

J. D. Barth Shurb has been elected to attend the Louisville Exhibition with the exhibit from Southern California.

## A LARGE IRRIGATING CANAL.

The following is from the Yolo Democrat, published at Woodland:

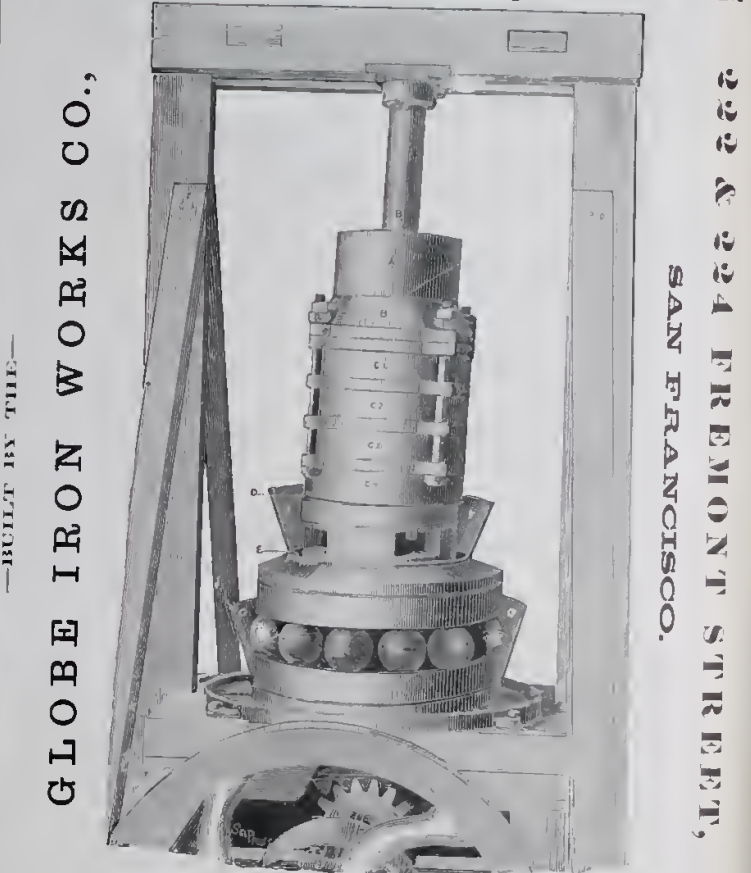
Work is being pushed ahead on the great canal that is being constructed to irrigate a vast tract of dry land in Merced county. The tunnel through the hills, about five miles above Merced falls, where the dam is being built, is nearly completed, and as soon as it is finished several hundred men will be put to work widening the old ditch. The main canal is now finished, and those who want to use the water have only to cut the sub-ditches. The value of the work can be estimated when it is known that thousands of acres of cheap land have already risen in value \$50 an acre, and town lots in Merced City have gone up to a price hitherto undreamed of. This scheme of irrigation virtually puts 200,000 acres of poor wheat land in condition to raise the best crops of fruits and vegetables. As there is no great local market for the crops, the fruit grown will be of a kind which will find a large

sale when canned, and in a few years there will be many canneries in Merced City, giving employment to a large number of persons. If this scheme fulfills the hopes of its projectors, it will be the commencement of a universal irrigation movement that will transform California from an agricultural State of large farms and small population, to a garden State of small holdings and large population.

## EDGE HILL VINEYARD.

Through the courtesy of the proprietor of this celebrated vineyard, we are the recipient of several varieties of wine and brandy of his own make, and pronounce them, without hesitation, equal to any that we have ever tasted from any country. Wm. Schaeffer, Esq., has devoted a great deal of his valuable time, for years, to the proper handling of his wines and brandies, and for purity and quality equals the best. His vineyard, which is near St. Helena, Napa county, is well worth a visit by the Knights Templar and others.

## THE DYER CANNON BALL QUARTZ MILL.



PATENTED OCTOBER 3, 1882.

We now offer with confidence the "DYER CANNON BALL QUARTZ MILL," having been fully tested by an expert use as it ever can be subjected to. We claim that it possesses more desirable qualities than Stamp or any other machine. Comparison with Stamp is always in order. Accordingly we state, that the cost is very much less, has less wear, takes less power to run and is not more than one-fifth of the weight of a Stamp Mill of same capacity. Freight is not one-fifth. Being made in light sections, can be packed by horse or mule over any trail anywhere and to otherwise inaccessible places for Stamp and other heavy Mills. It is simple, compact and movement is rotary, crushing, (not grinding) either wet or dry equally well, and running in either direction the need, readily geared for steam, water or horse power, and can be run by thirty Gundy Wheel on Pinion Shaft, on any side-hill where there is ten feet of level ground. It is quickly set up and removed, and can be placed on a breaker where it is an object and necessary. It breaks the Gold light and easy to amalgamate, and can be cleaned out with it. Adapted to either upright or flat screen as desired, or according to the work required to be done. The cost of the frame is very little and it can be constructed by any one at the place where used, thereby saving freight and packing.

We desire to call attention to the fact, that this machine develops a principle in crushing and pulverizing which is peculiar and entirely new. Briefly, it is a cylinder, (in sections) and consists of two, powerfully revolving the cylinder a slight oblique position, usually the common central point below, while above there are two, work to be done. In this feature rests an important element of the great force and power exerted by this machine. These two bodies, (cylinder and cone) which together we term the Rock-breaker, by a proper arrangement of rotating together in the same direction, and upon the introduction of the quartz, the cylinder and cone close together, exert a terrific force, and the rock breaks up from point to point until it finally falls out beneath the balls, and is further crushed by the weight of nearly the whole mill upon the balls, and the crushing action that every part of this machine does some work. There are no idle pieces, even the weight as a whole contributes largely to the operation. Referring to the cone, A, is a keeper through which the quartz enters the cylinder the cone or machinery working the mill. C, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. Above it takes the place, and as it is continuously, B, is where the crushed quartz comes from the rock-breaker. C, is the top section and upper shaft of cylinder, is a cone of hard iron built together in rule with the cone and constitutes the principal wearing part of the cylinder, and as it does so, the section above it descends to the balls, beneath which, when further pulverized, it passes through the screen. D, What only section directly acted on by the power driving the mill.

Parties interested in the working of mine, etc., and others, are invited to call and see our Mill work, at No. 520 Fifth Street.

REFERENCES.—S. B. Emery, Iowa City, Pioneer County, Cal.; Engle King Gold and Silver Mining and Water Co., Grizzly Flat, El Dorado County, Cal.; E. C. Moore, Grizzly Flat, El Dorado County, Cal.; P. R. Rankins, Grass Valley, Nevada County, Cal.; J. S. Stillman, Gold Hill, Nevada; H. L. Vinton, Gold Hill, Nev.; John Robinson, 1030 Market Street, San Francisco; Globe Iron Works, San Francisco, Cal.; Dwyer & Hauser, Assayers, 520 Fifth Street, San Francisco, Cal.

## PRICES, ETC.

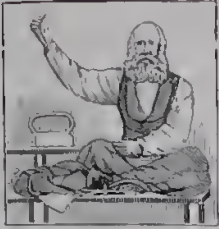
Capacity 1 1/2 tons, weight 500 lbs., with frame, price, \$150.00. Caps 1 1/2 tons, weight 800 lbs., without frame, price, \$75.00. Capacity 2 tons, weight 600 lbs., price, \$200.00. Capacity 2 1/2 tons, weight 1,000 lbs., price, \$300.00. Capacity 3 tons, weight 800 lbs., price, \$100.00. Capacity 4 tons, weight 1,000 lbs., price, \$150.00. Larger Mills in similar proportion as to capacity, price, etc. The two smaller sizes, of about 500 and 800 lb. weight, and of about 1 1/2 to 3 tons capacity respectively, are convenient for prospecting, etc. For information address,

GLOBE IRON WORKS CO.,

222 & 224 Fremont Street, San Francisco, Cal.



# NICOLL, THE TAILOR.



JUST RECEIVED

A Fine Assortment of Foreign and Domestic

Woolens for this Season.

—THE—

LARGEST STOCK

—ON THE—

PACIFIC COAST.

CALL AND SEE OUR NEW PATTERNS!

Suits to order, from.....\$20 00  
Pants to order, from..... 5 00  
Overcoats to order, from..... 20 00

1,000

DIFFERENT PATTERNS

—FROM—

WHICH TO SELECT.

MEN'S, BOYS' AND CHILDREN'S

SUITS AND OVERCOATS,

Manufactured by Ourselves, after the Most  
Approved and Latest Styles, at  
Short Notice.

WELL CUT, WELL MADE, STYLISH AND  
CHEAP.

You will do well to inspect before  
purchasing elsewhere.

CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

NICOLL, The Tailor.

PIELAN'S BUILDING,

816 & 818 Market Street,

AN FRANCISCO.

BRANCH STORES IN ALL PRINCIPAL CITIES.

## HUTCHINSON & MANN'S UNDERWRITING AGENCY.

From time immemorial, society has recognized the necessity of protection from loss of property by the uncontrollable action of the elements. Fire and marine underwriting has for centuries been regarded as an important branch of business, and it has received the closest attention of financiers and political economists. And by virtue of the improvement in systems of assurance, underwriting has made such rapid progress that, today, in taking risks, the percentage of loss can be so accurately estimated by accomplished experts, that both the assured and the organizations that take the risks are equally safe from great loss. Yet with all of these nice calculations and practical certainties, people do not like to insure their property with any company unless it has an established reputation for integrity and honorable dealing. Without intending any disparagement of other companies in our midst, we cannot help thinking that the long established, well known and highly esteemed firm of Hutchinson & Mann, (whose advertisement we publish in this number) possess every requirement exacted by those who may desire the protection of an insurance company from the loss of property. Its advance during a period of something over eleven years, from a small beginning to a most important business in point of capital, assets and reliability in the insurance world, is a fact that speaks for itself. It has been said by a distinguished writer on fire insurance that one of the best safeguards in underwriting on this coast where so large a percentage of the buildings

will continue steadily in their good work, bearing in mind that though these companies have come here to obtain risks, yet they want only the very best hazards to be obtained, and at most adequate rates. The Circular Letter contains from time to time many interesting communications on the subject of underwriting from their Eastern correspondents. It advises its agents to be exceedingly careful in their examination of all risks, and recommends them to be prompt in cancelling all policies on which they have a single doubt. They are also instructed to be prompt to refuse risks which they may not consider in every respect first-class.

### LUMBERING IN BUTTE COUNTY.

The Oroville Register has collected some facts on the lumbering industry, which we present herewith. But few are aware of the rank Butte county holds in this branch of the industrial pursuits. The mills are situated in the pine belt of the Sierras, at an altitude of from two to three thousand feet. As a rule they begin logging about the first of May, and continue the fall as long as the storms permit. Most of the sugar-pine lumber is shipped to San Francisco, where it finds a ready sale. In fact, there is a greater demand for sugar pine than the mills of California are able to supply. A dealer in San Francisco wrote to his agent in Butte, a few days since, that he was obliged to refuse an order from Australia for 5,000 doors, on



Up Vernal Falls.



Liberty Cap (Mt. Braderick).



NORTH DOME AND ROYAL ARCHES.

are frame structures, is that numerous wealthy companies in the Atlantic States and in Europe should participate so that no one company should, if judiciously managed, be exposed to serious danger of bankruptcy even in a case of a very great conflagration. Hutchinson & Mann have the leading agency on this side of the continent of a large number of foreign and Eastern companies; and we do not think it exaggeration to say that every one they have represented has been greatly benefited by their agency.

The figures and the high character of the companies in their list are guarantees of the standing of the firm. The combined capital represented by this notable fire and marine underwriting is all pledged as a safeguard against disasters. This firm has won a most enviable reputation for honorable and upright dealing in cases of loss and their promptitude in making settlements. They are doing a large business in our State. They are careful of the interests of the companies they represent, and fair alike to all their patrons.

Hutchinson & Mann are publishing a monthly Circular Letter especially for their agents. In each number will be found several well written editorials and carefully selected articles from the ablest journals devoted to fire and marine underwriting. From the copy before us, we learn that the business of the firm under consideration has improved considerably within a brief period. Its net premiums during the last thirty days have greatly increased, notwithstanding the fact that many risks were refused which were not considered desirable, either from the rate, or on account of the hazard. The firm thanks all of its agents for their energies in behalf of the companies it represents, and trusts they

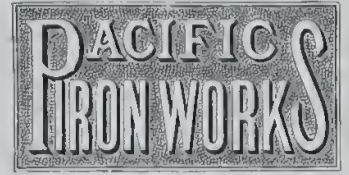
account of want of stock to make them from. The demand for lumber this year is unusually great. One leading mill owner informs us that there has been more inquiry for lumber among farmers than ever before, so early in the season.

There are eighteen saw mills in the county. Of these two are run by water power and sixteen by steam power. These eighteen mills give employment to 380 men, and have a daily capacity of not less than 370,000 feet of lumber. About half of this is sugar pine. The mills directly employ about 120 oxen, horses and mules, and indirectly, afford employment to many teams that haul freight into the mountains and load back with lumber. —Butte Record.

### A SPLENDID BUSINESS COLLEGE AND TELEGRAPHIC INSTITUTE.

The Pacific Business College, under the able management of Messrs. CHAMBERLAIN & ROBINSON, is fast winning fame throughout the Pacific Coast. This Institution is conducted on thorough business principles in every particular. The management are entitled to much praise, for they have surrounded themselves with an able corps of teachers for every department. Our readers who may desire to give their sons a thorough business education, will find it to their interests to avail themselves of the privileges of this ably conducted college.

Subscribe for THE RESOURCES OF CALIFORNIA.



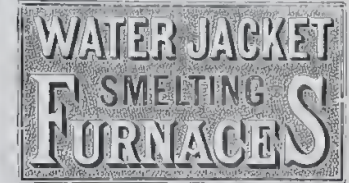
1850. 1883.

RANKIN, BRAYTON & CO.,  
GENERAL OFFICE AND WORKS, San Francisco, Cal.  
Branch Works, Chicago, Ill.

—BUILDERS OF—

### MINING MACHINERY.

Plants for Gold and Silver Mills, embracing the latest and most improved machinery and processes for lease and free ore. Water Jacket Smelting Furnaces for silver, lead and copper ore, with new and important improvements superior to any other make. Hoisting Works, Pumping Machinery, Crushing and Grinding Mills, etc. We offer the best result of 30 years' experience in this special line of work, and are prepared to furnish from San Francisco or Chicago the most approved character of Mining and Reduction Machinery, superior in design and construction to that of any other make, at the lowest possible prices. We also contract to deliver in complete running order, Mills, Furnaces, Hoisting Works, etc., in any of the mining States and Territories. Estimates given on application. Send for Illustrated Circular.



FOR COPPER AND ARGENTIFEROUS CALENA ORES.

PACIFIC IRON WORKS,

RANKIN, BRAYTON & CO.,  
GENERAL OFFICE AND WORKS, San Francisco, Cal.  
Branch Works, Chicago, Ill.

The Pacific Water Jacket Smelters embrace many features that are entirely new and of great practical utility, which are secured by letters patent. No other furnaces can compare with these for durability, and in capacity for continuous and uninterrupted work.

More than 100 of them are now running on the Pacific Coast and Territories, giving results never before obtained as regards continuous running, economy of fuel, grade and quality of bullion produced. These Smelters are shipped in a complete state, requiring no brick or stone work, thus saving great expense and loss of time in construction. Complete smelting plants made to order, with all the improvements that experience has proved valuable in this class of machinery. Skilled and experienced smelters furnished when desired to examine mines and to superintend constructing and running of furnace. Estimates given upon application. Send for circular.

Chicago Office and Works, 100 N. Clinton St.,  
WILLIS G. HODD, Superintendent.  
New York Office, 35 Broadway,  
HENRY B. MERRAY, Manager.

### CALIFORNIA MARKET,

CALIFORNIA STREET TO PINE,

Between Montgomery and Kearny Streets.

The Leading Market of the Pacific  
Coast.

DEPOT FOR THE CHOICEST MEATS, FISH, POUL-

TRY, FRUIT, VEGETABLES, AND

DAIRY PRODUCE.

Goods purchased in this Market need no other recommendation.

THOS. BROWN, Superintendent.

J. M. LITCHFIELD & CO.,

Manufacturers of and Dealers in

MILITARY GOODS,

SOCIETY REGALIA,

Lodge Supplies, Flags,

Banners, Etc.

415 MONTGOMERY ST.

SAN FRANCISCO.



## THE EGGERS VINEYARD.

The tract of land called the Eggert Vineyard contains 90 acres, and is located about five miles northeast from Fresno. It was purchased in 1868; from that time to 1899 the sole product was grain and hay, but that, owing to the uncertainty of the rain, was abandoned. It is beautifully laid out; avenues of Lombardy poplars lead to different places affording drives through the vineyard. It is also partly bounded by poplar trees and canals.

In 1890 one hundred acres were set out in vines, and every year thereafter the acreage was increased, so that, at present, there are about 300 acres in bearing vines. There are fifteen acres of choice fruits especially adapted to the climate, and twenty acres in alfalfa; also several hundred acres in grain and hay.

The land has a fall to the south and west of from ten to twelve feet to the mill, otherwise it is level, with no mounds or "hogwallow" to interfere with successful cultivation. The fact of it being so, makes it feasible for thorough and systematic irrigation, and at the same time preventing any water remaining on the land and stagnating there, thereby giving the subsoil its proper moisture and keeping the surface soil dry, which, as is well known, are the requirements for the success and maintenance of a vineyard.

The soil is a light, sandy loam, porous and containing the mineral elements essential to the production of fine wine and table grapes.

The vineyard contains the following varieties of grapes: Zinfandel, Burger, Blave Elben, Malvasias, Mission, Folle Blanche, Muscatel de G. B., Muscat of Alexandria, Seedless Sultanias, Tinturier, Flame Tokay, Feherzagos and Chardonnay. These are planted in checks or squares, from two to eight acres each. The vines are placed eight by eight feet apart, some nine by nine, but the first-named distance has been adopted by most of the clayardists.

The Zinfandel grape appears to do exceedingly well. These vines, now three and a half years old, are loaded down with from 25 to 35 bunches to a vine. The Folle Blanche and Muscats are, also, heavy bearers, especially the latter. The Muscats are chiefly used for making raisins, not being suitable for dry wines, mostly on account of the Muscat flavor which they contain. The orchard contains some of the best fruits specially adapted to that climate. The alfalfa, on an average, bears about six tons per acre every year; it thrives well and never fails in producing a good crop.

The improvements on the place are: dwelling house, wine cellar, distillery, cooper shop and other out-houses. The winery and distillery are spacious buildings, constructed of adobe, sun-dried bricks; the walls are twenty-six and one-half inches thick and about twenty feet high. The difference of the temperature in the cellar from that outside is about twenty degrees, so that a cool and refreshing spot can always be found, although the weather may be very warm. The machinery contained in these buildings is of the latest and most improved that can be procured. The steam crusher is capable of crushing 125 tons of grapes per day when run at its full capacity. The storage capacity of the cellar is about 200,000 gallons of wine. In connection with the distillery is a windmill and a large tank. An artesian well of 125 feet in depth furnishes an abundant supply of good clear water for drinking purposes, and also for use in the distillery. Last year there were made about 30,000 gallons of wine and 3,000 gallons of brandy.

Grapes were purchased at this place, from \$20 to \$25 per ton, according to kind and quality. Muscat grapes do not bring so high a price at the cellar as wine grapes, owing to reasons heretofore mentioned.

The irrigation of this vineyard is carried on by means of a canal, the water of which is taken out of the Kings river and Fresno Canal Company's ditch which runs to the north of this tract. After the water is on the land, lateral ditches convey it to places intended to be watered; these form a network all over the vineyard and allow a speedy and complete irrigation at any time. The water supply being abundant, the fears of a drought are thus allayed by this system of artificial irrigation, which is equally as good and more reliable than periodical and uncertain rainy seasons. The land can be either submerged or simply irrigated, as the case may require. Here simply irrigation has answered all purposes so far, still when submergence must be resorted to, it can be easily applied.

## NORCROSS &amp; CO.

The old and well-known house of Norcross & Co., was established in the year of '49 by the present senior member of the firm, Col. Daniel Norcross, and stands at this day pre-eminently the head in their peculiar line of business on the Pacific Slope. Some of the most elaborate and magnificent costumes for the members of California Commandery, No. 1, E. T., have recently been manufactured by this house, excelling anything else ever heretofore attempted, as will be seen in the procession of the coming Conclave of Knights Templar in this city, during next month. They are also manufacturing elegant and superior outfits, of the regulation style, at less price than can be imported from the East. This branch they have made a specialty, in which they have proved a perfect success. Odd Fellows' regalia of the most exquisite designs, in embroidery and workmanship, are also a leading feature in their manufacturing business.

Paraphernalia of every description is to be found, in this old established house, of their own manufacture, in quantity much superior to Eastern importation, and at equally low prices.

Another branch of industry is the manufacture of flags and banners; in this line of business the house has become justly celebrated for the style and character of the many beautifully-designed banners and flags furnished by their establishment. Army and Navy embroidery is executed in a highly artistic manner, and everything pertaining to military or naval goods, such as awards, belts, shoulder knots etc. etc., may be found at the pioneer establishment of Daniel Norcross & Co., Masonic Temple, No. 6 Post St., San Francisco.

## THE FIREMANS FUND INSURANCE COMPANY.

There is an instinctive desire on the part of all who seek protection against loss by fire, to be certain that the insurers are themselves reliable, and strictly follow the rules governing honorable underwriting. The most vital points, that call for consideration, are absolute security and the certainty of obtaining prompt and fair settlement in the event of disasters occurring. It has often been remarked by those who have given the subject careful attention, that there is no position in the commercial world, which requires established integrity, executive ability and financial skill, more than the conduct of an insurance company in the management of its business. To the assured, the community looks with that degree of confidence that renders the slightest deviation from strict integrity, in the accumulation of risks, as great a crime as the abstraction of funds deposited as a sacred trust. The position occupied by our insurance interests—their soundness and strength—are elements of as great importance as similar considerations in regard to our banking institutions. When persons possessing these facilities, having been tried by long intercourse with a community, tender their services and the good offices of the companies they represent, they should be rewarded, for their fidelity to the great trust committed to them, by an extended patronage.

In this connection, we gladly call the attention of our readers to the advertisement, in another column, of the long-established company which heads this notice, whose judgment and discretion, in taking risks, as well as honorable dealing in all trusts reposed in them, have won an enviable reputation among all classes.

The Firemans Fund Insurance Company is the oldest as well as the wealthiest organization of the kind on the Pacific Coast. Its career, during the last two decades, is a thorough and complete history of the insurance business in California. It enjoyed uninterrupted prosperity until the great Chicago fire occurred, in 1871, when it suffered a loss of nearly \$200,000, a greater sum than its entire capital. The directors leaped an assessment of 50 per cent. to be paid at once, which enabled the company to meet every liability. The same general policy was pursued when the company suffered another severe loss by the great Boston conflagration a year later. To meet this emergency, \$200,000 were obtained by reducing the capital that month.

Out of the five California companies taking risks, in the Atlantic States, at the time of the Chicago disaster, the Firemans Fund was the only one that remained in the field; and for more than ten years thereafter it was the only representative of California underwriting east of the Rocky Mountains. During that period it paid losses aggregating many times its capital. By its noble conduct this company has earned a reputation for integrity which has placed it in the very front rank of underwriting. We congratulate the company upon its well earned success. D. J. Staples, the President of the Firemans Fund for sixteen years, is a California pioneer. He is recognized as a man of trustworthy character and capacity. His indomitable courage subsequent to the great Eastern conflagration, to which we have alluded, contributed, in no small degree, to the success of the policy then adopted by the company under his management. For the last seven years he has been President of the San Francisco Board of Underwriters. Thomas S. Chard is the general manager, in Chicago, for the Atlantic States. By his judicious management of its affairs it may be truthfully said, that the company has been a gainer, on the Eastern side of the continent.

The semi-annual statement of the Firemans Fund Insurance Company shows an unusually healthy growth of business, the gross premiums for the past six months being \$523,140 18, as against \$421,320 18 written during the corresponding term last year, a gain of over \$100,000 on the six months' business, and showing their gross premiums, at present, to be averaging over \$1,000,000 per year; placing the company, as regards the volume of business transacted, as it already is in assets, considerably in advance of any other company west of New York State.

As this is the first year that the company has passed the million dollar line in premiums, it is evident that it has reserved this new departure until the Conclave year, out of compliment to the Knights Templar.

## SOLANO'S GRAPE FIELDS.

A Solano county farmer informed us recently that, in his opinion, the grape yield in Solano was more per acre than in any other county in the State. One reason for that is, that owing to the peculiar climate with which we are favored, it is not necessary to prune vines up high from the bottom. The testimony of Mr. Briggs is, that the largest and best clusters of grapes grow close to the ground. In the coast counties, and other counties with a humid atmosphere, it is necessary to prune high from the ground, in order to give a good circulation of air, and successfully battle with mildew, blight and fogs. The commission merchants inform us that the Solano county wine grapes are the most desirable offered in the market, from the fact that they contain more saccharine matter than those from any other section.—*Democrat Tribune.*

## A COMPLETE GROCERY HOUSE.

The grocery house of Messrs. LEVENHAUM, GOLDBERG & BOWEN, 428-432 Pine Street, is the most thorough and complete in all its appointments, of any house in this line of business on the American continent. This may sound like very high praise, and it is, but true, nevertheless. We assert, without fear of successful contradiction, that no other grocery house in the United States has such a variety of preserved delicacies, from all parts of the world, as this.

1883.

YOSEMITE.

GREAT REDUCTION IN TIME AND EXPENSE.

FOR SIXTY DAYS ONLY.—

ROUND-TRIP TICKETS, \$55, \$50 AND \$37.

## THE YOSEMITE VALLEY

Is and will ever be the marvel and delight of all who have seen its matchless beauty and majesty. Much has been written descriptive of Nature's greatest masterpiece, and yet no one has succeeded in conveying an adequate idea of its peerless grandeur. In fact its charms must really be seen and felt, for it is an absolute fact that neither pencil nor brush, nor photographic process, can give them faithful portraiture.

Standing upon "Inspiration Point," the tourist obtains the first and most impressive view of the valley, one that will remain indelibly stamped upon his memory. From this lofty promontory the eye falls first on "El Capitan," the monarch of rocks, and the most matchless piece of masonry in the world. "Then upon the beautiful "Bridal Veil Fall," "Cathedral Rocks," "Three Brothers," "North and South Towers," and many other masses of perpendicular granite, majestically lifting themselves to the heavens. The view from this point alone is ample recompense for the trip, and in the elegant coaches and behind the fast horses of the stage company the journey is delightful.



SENTINEL ROCK, 1,500 FEET HIGH.

THE ONLY ROUTE WHERE ALL POINTS OF INTEREST CAN BE SEEN WITHOUT BEING OBLIGED TO RIDE ON HORSEBACK.

By a new arrangement inaugurated this season, passengers can make the

ROUND TRIP IN FOUR DAYS,

After leaving the railroad, TAKING IN THE VALLEY, THE BIG TREES AND ALL POINTS OF INTEREST. This is done by leaving the valley the morning subsequent to their arrival, after visiting Mirror Lake, riding up the trail to Glacier Point. Thence, instead of going back the trail (a slow and uncomfortable process) they will be driven in stages along the new Tiumpike Road skirting the lower edge of the valley, crossing Bridal Veil Creek above the fall, and back to Clark's same day; thus utilizing the time by traveling homeward and viewing the valley at the same time. This trip is a most enjoyable one, and affords every opportunity of seeing the sights from the stage instead of on horseback, as heretofore.

## MARIPOSA GROVE.

A very important feature in the Yosemite trip is a visit to the Big Trees—the giants of the forest. The Mariposa Grove, from which accompanying cut was taken, is situated a short distance from Clark's station on the road, and is easily by all changes to the valley. The stage road winds through and around it so as to take the visitor very near to all the largest trees without leaving his seat. There are over 500 trees in this grove, all reaching a size that is inconceivable to one who has never seen them. The "GIANTLY PLANT" is 95 feet 7 inches in circumference, and some of its branches are fully 6 feet in diameter. Prof. Whitway, in his guide-book, says this is by far the largest grove, and contains trees of greater circumference than any other. No traveler in California should consider his visit complete until he has seen these gigantic monarchs of the woods. Second only to Yosemite, they are wonderful in their towering magnificence.

ALL YOSEMITE TICKETS GOOD FOR THE ENTIRE SEASON AND OVER EITHER MADERA OR MILTON ROUTE, AT PASSENGER'S OPTION.

—FOR TICKETS TO—

YOSEMITE,  
TAHOE, GEYSERS, LAKEPORT,  
AND CALAVERAS BIG TREES,

—APPLY TO—

SAM MILLER,  
NO. 2 NEW MONTGOMERY STREET, S. F.



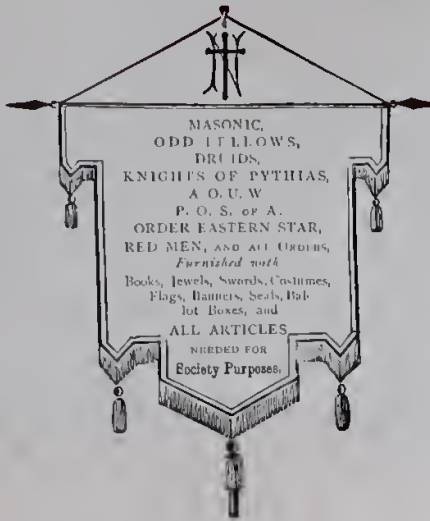
Established by Daniel Norcross in 1849.

## NORCROSS & CO.,

MANUFACTURERS AND IMPORTERS OF

REGALIA, PARAPHERNALIA, ETC.

MILITARY GOODS, FLAGS  
AND BANNERS.



KNIGHTS TEMPLAR COSTUMES  
A SPECIALTY.

NO. 6 POST STREET.

Masonic Temple,

San Francisco.

PRICE, \$8.00!

### TRIENNIAL CONCLAVE BADGE!

Adopted by the Triennial Committee and Triennial Union.



DESIGN PATENTED.

THIS BADGE IS INTENDED TO BE WORN BY Knights Templar and their Ladies during the coming Triennial Conclave of the Grand Encampment of the United States, and to be preserved thereafter as a souvenir of the occasion. The low price at which they are furnished (Three Dollars) places them within the means of all, and they are not only ornamental but useful as a means of recognition. They can be obtained from the manufacturer.

D. W. LAIRD.

San Francisco Jewelry Manufactory,  
27 POST ST., Near Masonic Temple.

Or from the Records of the two Commanderies in this city.

Watches, Jewelry and Diamond Work, Badges and Medals For Sale and Made to Order. Watches and Jewelry Repaired by Skillful Workmen.

-FINE-

### VINEYARD LANDS FOR SALE!

With an Abundance of Water for  
Irrigating Purposes.

### IN TRACTS OF FORTY ACRES AND UPWARDS.

Situated five miles northeast of Fresno,  
and adjoining the celebrated Eggers Vine-  
yard.

PRICE, \$40 PER ACRE, WITH WATER.

One-third Cash, Balance in One, Two and Three  
Years, at Nine per cent. Interest.

EGGERS & CO.,

214 California Street,

SAN FRANCISCO, CAL.

### HOW LANDS INCREASE IN VALUE.

We publish the following from the *Stockton Independent* of recent date, for the purpose of showing how it pays to invest in land in California:

A Easton, the well-known furniture dealer of this city, sold his ranch Murphy. The tract consisted of 1500 acres, and is situated twenty-two miles southeast of Stockton, near the John Jones Home place, and sold for \$45 an acre, or in all, \$67,500. Nate Harrell of this county was the purchaser, and the price paid is considered not too high. Ten years ago land in the same section could be purchased at the low price of \$15 per acre. Such sales set one to thinking. Why didn't I invest the \$2000 I possessed a few years ago in lands around the city of Stockton, instead of putting it into a corner grocery? is one of the first questions that will be asked. It could just as well have been done and money made, when the corner grocery has barely held its own. Another question is: Are there not now good opportunities for men to invest in lands that are bound to increase in value as each year rolls around? Lands a few miles from Stockton are all the time becoming more valuable, and the men who are now 40 years old may become comfortably situated financially, by the time they are 50, and perhaps sooner, by investing their money now. The history of California would seem to prove that no investment in land, whether it be tide lands, rich valley lands, chaparral lands or mountain sides, can be considered other than a wise move. The men of limited means the fact-hill lands of California offer splen-



EL CAPITAN—3,000 feet high.

did inducements. During the past ten years thousands of persons have made themselves pleasant and valuable homes in the foot-hills of the Coast Range or of the Sierra Nevada, and there is room for thousands more. Nature and reasonable industry perform wonders on these foot-hill farms in two or three years. Nature in California performs wonders that seem like the work of magic. The rich valleys become covered with a mass of waving grain; the sloping hillsides are rich with fruit, and the steep sides of the canyons produce numerous varieties of the richest grapes, while everywhere rare flowers and tangled shrubbery, and succulent grasses paint the picture with green, and yellow, and purple colors. Poor men in Stockton, or any other city, who only possess a few hundred dollars, may all possess productive land in sufficient quantity if they will, and in many cases that could be mentioned the first crop has paid back the whole sum invested, or the full price of the farm. Doubtless Mr. Easton never discovered that he would receive so large a sum for the tracts of land he has just sold. So with a large number of men in this country and section of the State generally, they never dreamed when they paid all their money on a ranch, with the balance secured by a mortgage amounting to a thousand or two, that they would be absolute owners of the property in two or three years, but such cases are numerous.

### VISIT THE CALIFORNIA MARKET.

This market always contains the best of everything, the choicest fruits from all parts of California, and also, from all parts of the world. The dealers in all the various departments are polite and courteous to patrons and visitors. Mr. Theo. Brown, as superintendent, has had charge for many years, and has discharged the important duties of the position in a very acceptable manner to the public. The display in this market strikes visitors from abroad as wonderful, for there is no day of the year that the finest fruit and freshest of vegetables may not be seen.

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Choicest Eastern Hams, Bacon, Lard and Foreign Sausages of all kinds.

CORNED BEEF AND PORK FOR SALE BY

THE BARREL.

1164-1168 Market St., and 6-8 Taylor St.

### THE HARDY OLIVE.

A St. Helena correspondent, who is familiar with olive culture in Europe, writes to the *Call*, of this city, as follows:

In the bottom land of the Napa valley the writer took pleasure in observing how hardly a few olive trees, from which the fruit (now in the shape of delicious pickles) was gathered in January, with the thermometer down in the twenties, stood the ice and snow of the last extraordinary winter. A water pipe at the foot of one of these olive trees caused a thick crust of ice to form, not thawing for days. The noble tree seems to be the better for it. (Other kinds of trees suffered; the frosts made several victims near, but no olive trees succumbed. This proves that the native olive tree, for such now is the variety planted by the Spanish priests a hundred years ago at their Missions, is thoroughly able to second the care of the planter in putting its shoots into proper soil and position. Not rich soil, but moisture in substrata, is what it requires; stones on the surface are no hindrance to its prosperity.

In view of the expectation that olives will in a few years form an important item in our productions, a few facts in relation to their market values may prove interesting. This real value of good commercial olive oil, by the cargo or in considerable quantities for exportation, averages \$180 to \$200 per ton, with casks, free on board. This brings the pound of oil to about nine cents, if placed in competition with other oil-producing countries. About ten pounds of olives being required for one of oil, the value of one pound of olives is less than one cent. Calculating values by the price of the imported article arriving in bottles, being surcharged with duty, freight, commission, etc., and being the price governing the California market, the result is much more satisfactory to the producer. But in making up the budget for the future, and arriving at the figures at which olive oil will probably sell at wholesale when we have to depend on an export market, planters will ask what is the value of olive oil in the great shipping centers of Europe, and what is the lowest price at which it will pay to plant olives? In fixing the cost of an olive plantation it must be remembered that soil can be utilized that, from the protuberance of rocks or other causes, is inaccessible to the plow; that the trees require little cultivation; that the oil is an article that can be stored and becomes more valuable by age. Thus being free from the inconveniences that attend ordinary fruits, oil is a safe investment when produced in superabundance, and over-production is out of the question, especially in a country whose population increases as rapidly as in the United States and consumers are rapidly growing in numbers.

### MINING MACHINERY

We would call attention to the advertisement of the Pacific Iron Works, Baskin, Brayton & Co., of San Francisco, in another column. This is one of the oldest and most noted establishments in the country. They have long made a specialty of mining machinery, and their experience in the business runs through the whole history of mining on this coast. The establishment is a very extensive one and thoroughly equipped in all its departments with the best engineering ability and mechanical appliances that the country affords, and the products of their work may be found in nearly every mining camp of importance west of the Rocky Mountains. The works have long been noted on the Pacific Coast for the superior character of their machinery, and the many valuable improvements they have made in the various mechanical appliances which have contributed so much to successful mining. Their Smelting Furnaces for both Galena and Copper have revolutionized this branch of business, and added immensely to the value of this class of mining property. Their Hoisting Works are noted for their convenience and safety, their Stamp Mills for effective and economical results.

Parties purchasing from the firm here mentioned can have every assurance of honorable dealings, and the benefit of their long experience and intimate knowledge of the business in all its branches.

### A BEAUTIFUL TOWN.

One of the prettiest places in the San Bernardino is the snug little retreat of Crafton. The press excursionists of two years ago were generously entertained here by the proprietor, Mr. Crafts and all were highly delighted with the visit. The lands connected with this place will soon be sought for vineyards and orange growing. They are very favorably located, within the reach of good water, and, in connection with Redlands and a small intervening tract, will, in all probability, eventually form connected settlement fully as extensive and equally as thrifty and well fitted for orange and raisin culture as any other locality. -  
*Cor. Rural Press.*

### PRICE OF LAND.

There was, says the *Buteo Record*, 1,610 acres of the Farwell ranch (Butte county) sold last week for \$68,000. This is equal to \$42 per acre.



## INQUIRING AS TO OUR CAPACITY.

Recently Dr. Max Seering, Teacher of Political Economy in the University of Bonn, has been visiting this State, and we believe is still upon this coast, upon a mission for which he is accredited by the Emperor of Germany. The purpose of his visit is to ascertain the capacity of America to produce meat and bread-stuffs for Europe. If she can do so, and deliver the same in Europe to advantage, it will be useless for Germany to continue in agriculture, and other industries must command the attention of her people. Prof. Seering is a gentleman of cultured intelligence and keen observative powers. He is not willing to trust to cold statistics, but goes into the leading sections of the United States and the Canadas to see for himself, to ascertain facts at the fountain heads, and that he may observe conditions and examine witnesses. In California he confessed that he was not only surprised, but quite amazed at the capacity of the soil, and astonished at the proof of the fact that the State produces now one-sixth of all the wheat exported from the United States. He will go back to Germany with full notes of inquiry and response representing the best intelligence in this State on all topics relating to soil, production, stock-raising, etc., and incidentally will be well informed upon all industrial topics relating in any way to California. He leaves the State to make a leisurely trip along the line of the Northern Pacific Railroad, and thence to Winnipeg, and will examine quite thoroughly into the food resources of Oregon, the northern Territories and of British Columbia. He came to the coast with his credentials indorsed by George B. Loring, United States Commissioner of Agriculture. In this State he was given letters of introduction to a large number of prominent agriculturists, well-informed citizens, practical stock-raisers, investors and representatives of capital. The significance of such a visit is found in the fact that the products of America are becoming important factors in the internal economy of Europe, and this leads to unlimited suggestions and opens lines of thought and speculation that deserve distinct and elaborate treatment.—*Sacramento Record-Union*.

## IMPORTATION OF ORANGES.

Edwin T. Earl, of San Francisco, who has been engaged in the fruit shipping business several years, visited Riverside a few days since. He had just returned from New York where he spent some time investigating the orange market. He said the people had no idea of the immense amount of fruit shipped into that and other Eastern cities from the Mediterranean. A single steamer would bring in 25,000 boxes of oranges, all of which would disappear on the market like dew before the morning sun. It must be remembered also that the entire Riverside crop of oranges would not make, the past season, a single steamer load. He stated that there were more oranges landed on the Atlantic Coast, in a single day the past season, than there were raised on the Pacific Coast the past year. All that the market requires is a reasonable price for the fruit in the orchard, and a fair rate of freight to the northwestern States. These two points reached, California can not raise enough oranges for the western market.—*Riverside Press*.

## TABLE MOUNTAIN CURIOSITIES.

In drifting recently in the old gravel channel of the Empire mine last week, Dr. Blitchley found the stump of a pine tree which is buried up 160 feet in the lava. It is about a foot in diameter, and is partially petrified, some parts of it being quite soft. The miners found a crevice about an inch wide on the west side of the channel which extends across the top of the drift through the detrital and lava to the surface—a distance of 160 feet. This is known as a certainty, for there are no old diggings in the vicinity, and the draft was sufficiently strong to extinguish a lighted candle. When the miners first struck it, it gave forth a roaring noise, as of a waterfall—but, upon examination, they found a current of air drawing up. According to our geological knowledge, this evident crack must have taken place some minutes after the cooling process had taken place, and the molten lava flow had subsided. Dr. Blitchley has the honor of opening this virgin crevice.—*Tuolumne Independent*.

THE RESOURCES OF CALIFORNIA is the best paper to send to your friends abroad.

## THREE ORANGES CONTRASTED.

Mr. L. H. Washburn, of the Washburn excursion party, presented the *Times* with three oranges recently, one being a fair sample of the Florida fruit, another coming from Mexico, and the third a Los Angeles orange, not especially picked out as the best of our varieties, but being an ordinary specimen of the average orange sold in our markets. The Mexican orange was juicy and sweet, but lacked flavor, and clearly lacked the qualities necessary for long transportation, as it had already begun to decay. The Florida orange was slightly tart, yet rather insipid and very fibrous and "colony." The Los Angeles specimen had a fine, rich flavor, but was the most acid. It was juicy, had but little pulp, and could have made the journey from the Pacific to the Atlantic and back here again without being in the least injured. The great failing of both the Florida and tropical Mexican oranges is their inability to bear a long journey. Dealers in New York occasionally have large consignments spoil on their hands when the market is glutted, while no such trouble is experienced with the California orange. Judging from the sample tested it is safe to say that there can be little important competition between the fruit grown in the three countries. Each has its season and each its special admirers. One straw which shows the popular favor in the East towards our fruit is the fact that when it is placed side



South of Half Dome.

by side with that from Florida it has thus far invariably brought the highest prices.—*Los Angeles Times*.

## THE FRUIT TRADE.

Few people have a correct idea of the management of the fruit canning business in California. In value it will soon equal that of the cereal production. Last year the fruit trade of the State reached the enormous sum of eight millions of dollars, or nearly forty per cent. of the value of the entire production of the gold mines. The yield of precious metals is decreasing every year, while the grain and fruit yields are increasing. It is to the products of the soil and manufacturing industries that California must look for her future wealth. The grain-producing capacities of the State are known, but its fruit-growing possibilities are only as yet partially comprehended. The investment of capital in fruit-canning establishments in various localities, is having the effect of encouraging fruit growing adventures. Many farmers have discovered that and many more are coming to the conclusion that there is more profit in an acre of orchard or vineyard than there is in several acres of grain. Although fruit raising is only on the threshold of development, last year's marketed product is worth eight millions of dollars! What it will be in the course of another decade remains for the future to reveal.—*Yolo Democrat*.

## THE BALDWIN!

## THE BALDWIN!

THE LEADING HOTEL  
OF SAN FRANCISCO, CALIFORNIA.

This Hotel was Completed and Opened in May, 1878, and is Conducted on the American Plan. Over \$3,500,000 having been expended by Mr. BALDWIN in its Construction and Furnishing, THE BALDWIN is the most Elegantly Appointed Hotel in the World. Situated on Market Street, at the intersection of Powell and Eddy Streets, and fronting four principal streets in the business center, it is convenient of access to and from all quarters of the City. Eight lines of Street Cars pass its doors. Hotel Coaches and Carriages in waiting at all Steamers and Railway Depots. Tourists' Headquarters. Special Accommodations for Families and Large Parties.

Prices the Same as at other First-Class Hotels,  
\$2.50 to \$5.00 per Day.

H. H. PEARSON, Proprietor.

Formerly proprietor of the Cosmopolitan, San Francisco.

BRUSH HARDENBERGH,  
Chief Clerk.

M. A. FRENCH,  
Clerk.

## PACIFIC COAST LAND BUREAU,

President, - - WENDELL EASTON, Auctioneer, - - - J. O. ELDRIDGE.  
vice-Pres. and Gen. Man., GEO. W. FRINK, Secretary, - - - F. B. WILDE.

NO. 22 MONTGOMERY STREET,  
San Francisco, California.

Sub Agencies at Each County Seat of the State.

AGENT FOR THE SALE OF LANDS OF THE CENTRAL AND  
SOUTHERN PACIFIC RAILROADS.

Agency for Sale and Exchange of Farming Lands. Large Tracts  
Subdivided and Sold at Auction or Private Sale.

## IRRIGATED VINE LANDS

In Fresno County.

—PART OF THE—

## BANK OF CALIFORNIA TRACT,

Near the flourishing town of Fresno, but also hours from San Francisco by railroad, and possessing one of the most healthful and delightful climates in the world. 16000 acres of land divided into farms of any size. A PERPETUAL WATER RIGHT FOR IRRIGATION SOLD WITH THE LAND. Cuts from the never-failing waters of Kings river. This wine and raisin crop is California's greatest bonanza. Returns in vineyards: \$100 to \$200 annual profit per acre. Plant only on irrigated land, for it is the most profitable, the water is the only protection against phylloxera. The land is level, slightly inclined toward the west, and ready for immediate use; the soil is a rich, sandy loam of great fertility. No fever and ague, and for throat and lung troubles the dry air of this section far exceeds Los Angeles or any other coast county. See United States Census reports. Seven canals traverse this tract and each owner can have water.

It is the cheapest and most desirable land now offered in this market, and we cannot compare with any other land in the State. Sold, with water right and canal to each quarter section, in subdivisions any size, at reasonable prices. Payable one-fifth cash, balance in annual installments to suit.

For maps, circulars, reports and letters from resident farmers and vineyardists, and all further information, apply to the

PACIFIC COAST LAND BUREAU,

Office, No. 22 Montgomery Street, San Francisco.

Or to W. P. HABER, Fresno.



## EDGE HILL VINEYARD, WINE CELLAR AND DISTILLERY,

Near St. Helena, Napa County, California.

SCHAEFFLER'S CELEBRATED VACUUM DISTILLED

### SANITARY BRANDY

—AND—

## Brands of Red and White Wines.

STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTED

Burgundy, Bordeaux and  
Rhine Wines.

Orders Received and  
Promptly Attended to by

WM. SCHAEFFLER,

PROPRIETOR.

## HOME MUTUAL INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY.....1883.

## FIRE ONLY

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155 239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

### OFFICERS:

J. F. ROUGHTON.....President.

J. L. N. SHEPARD.....Vice President.

CHAS. R. STORY.....Secretary

R. H. MAGILL.....General Agent.

J. D. SPRECKELS & BROS.,

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS.

325 Market Street,

SAN FRANCISCO.

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the

## STANDARD SYRUP,

A SUPERIOR ARTICLE.

Put up in Barrels Expressly for Home Consumption.

ALSO,

## EXTRA HEAVY SYRUP,

In Barrels for Export.

## REFINED SUGARS,

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.

## FIRE AND MARINE INSURANCE AGENCY OF HUTCHINSON & MANN,

Nos. 322 and 324 California Street  
and 302 and 304 Sansome Street,

San Francisco.

Agents for The

Agricultural Insurance Co. ....New York,  
\$1,521,630.

Confiance Ins. Co. ....Paris, France,  
\$6,835,298.

Fire Ins. Ass'n (Limited) ....London, Eng.,  
\$1,573,291.

Grand Insurance Company ..Philadelphia,  
\$1,208,645.

New Orleans Ins. Ass'n.....New Orleans,  
\$573,216.

St Paul F. & M. Ins. Co. ....St. Paul, Minn.,  
\$1,048,673.

Standard Fire Office (Limited) London, Eng.,  
\$1,300,000.

Tentonia Ins. Co. ....New Orleans,  
\$118,045.

## MARINE.

The London and Provincial Marine Insurance Company.....London,  
\$6,278,362.

La Fonciere Marine Ins. Co. ....Paris,  
\$2,230,000.

Capital Represented. . . \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. L. CHALMERS,

Special Agent and Adjuster.



OPPOSITE UNION SQUARE

THE LEADING

## Commercial School

ON THE COAST.

## LIFE SCHOLARSHIPS

—FOR—

Business Course. Only \$70.

NO VACATIONS.

Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Healthful Location.  
Ladies Admitted.

Special Inducements Offered to Persons of Neglected Education.

Business Course.  
Academic Course.  
Continued Course.  
Penmanship Course.  
Modern Language.  
Phonographic Course.  
Special Branches.

For Further Information call at the  
College Office

No. 320 POST ST.

Or Address the Proprietors,

CHAMBERLAIN & ROBINSON.

## A MOUNTAIN VINEYARD.

Jacob Schram, who was a barber in Napa twenty years ago, and afterwards carried on the tonsorial business at the White Sulphur Springs during the watering season of that fashionable resort, is now said to have an income of \$10,000 per year from his vineyard above Calistoga. He located there for the benefit of his health, and in after years was in the habit of meeting expenses by visiting the Sulphur Springs Saturday night, returning Monday, thus depending on his barber business to bring in a few dollars. His pluck and industry have met their reward, and he now produces a brand of wine which has a value and established reputation throughout California and in many of the large cities of the Eastern States. In speaking of Mr. Schram's location, a correspondent, says: "I remember, very well, passing over, several years ago, Mr. Schram's place before it was occupied at all. Had I then been told that a man of industry and economy, by settling there could make a living, I would have voted the assertion the most perfect nonsense. Yet this intelligent German, by faith and persistent work, has wrought upon that uninviting tract of land a wonder. He has a superb house and all the comforts attached thereto. He has more—for the barren hill upon which he settled now yields him an annual income of \$10,000 a year. I wish it to be known, and I am sure of



First Log Hut in Mariposa Grove.

it, that within the borders of this county there are hundreds of places now lying idle, susceptible of being made as productive as the one I have been writing of. But let no faint-hearted, irresolute man make the effort to build such a home, for without diligence, prudence and hope, he will certainly fail. It is to be noted also that the lands I write of here produce a better wine than the richer valley lands.—Cor. Napa Reporter.

## BORAX MINES.

The Print says: There is at the present time considerable excitement in Calico District over recent discoveries of borax deposits within a couple of miles of the town of Calico. The principal deposits are in the eastern part of the district, and comprise an area of four or five miles square. Several sales were made last week of borax claims, amounting to \$4,250, and since then, lands hitherto supposed to be worthless, have been located in twenty-acre claims as borax deposits. Several claims located for silver but considered poor, have been prospected for borax, and in some places with favorable results. It is claimed by some that there are large deposits of borax in the district, some of it of fine quality. In one place there is a small mountain of it, and if all the deposits located are in reality borax of a marketable quality, the immense quantity of it cannot fail to be a source of great wealth to this district.

Subscribe for THE RESOURCES OF CALIFORNIA.

## CALIFORNIA DRIED FRUIT.

There are certain lines of dried fruit in which California has a monopoly for years to come. Among them may be mentioned apricots, peaches, plums, pears, figs, prunes and grapes. The following table gives the number of boxes of raisins manufactured in California during the past seven years: For 1876, 40,000 boxes; 1877, 25,000; 1878, 70,000; 1879, 70,000; 1880, 60,000; 1881, 95,000; 1882, 150,000. Messrs. G. W. Meade & Co., of San Francisco, estimate the production of this State in the commodities indicated for 1882 as follows: Dried peaches, 800,000 pounds; pears, 100,000; apples, 1,000,000; apricots, 200,000; prunes, 500,000; honey, 100,000; walnuts, 600,000; almonds, 200,000. The sales of California dried fruits, raisins, etc., are increasing. The total value for 1882 will reach nearly \$2,000,000. The average prices were: Raisins, \$2 per box; dried peaches 7 1/2 c. per lb.; pears, 7 c. per lb. There has been an improved demand from all parts of the East for the dried fruit and raisins of California. Sales are about 20 per cent. in advance of last year. There are two or three facts of importance in this business. Poor fruit will not do to dry. Sun-dried fruit cannot compete with the bright, fresh product of the evaporators. The work must be done carefully and skillfully, and the fruit must be well packed in neat parcels to strike the eye favorably at first sight.—Los Angeles Express.

## THE STATE'S GREATEST NEED.

California needs immigrants, not only those who come here to spend wealth accumulated elsewhere, and live in our beautiful cities, and enjoy our landscape and climate, but those who have wives and children for whom they must earn a living and make a home. Our large tracts of land will be subdivided under the pressure of a large and willing population which demands them for homes. We want a population of agriculturists, people of rural tastes and instincts, who know how to live on the soil and direct its fruitfulness to their profit and the glory of the State.—Oakland Time

## COMMERCIAL INSURANCE COMPANY OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, June 30, 1883, \$390,524.06

Losses Paid Since Company was Organized, \$906,379.13.

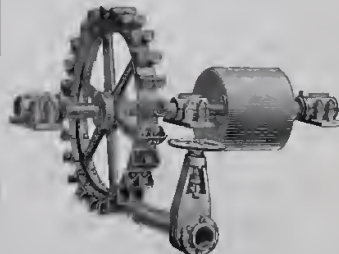
JOHN B. WISE.....President

GRAS. A. LATON.....Secretary

## OFFICE.

No. 405 California Street, S. F.

PELTON WATER WHEEL.



MANUFACTURED BY

L. A. PELTON, - - - NEVADA CITY, CAL.

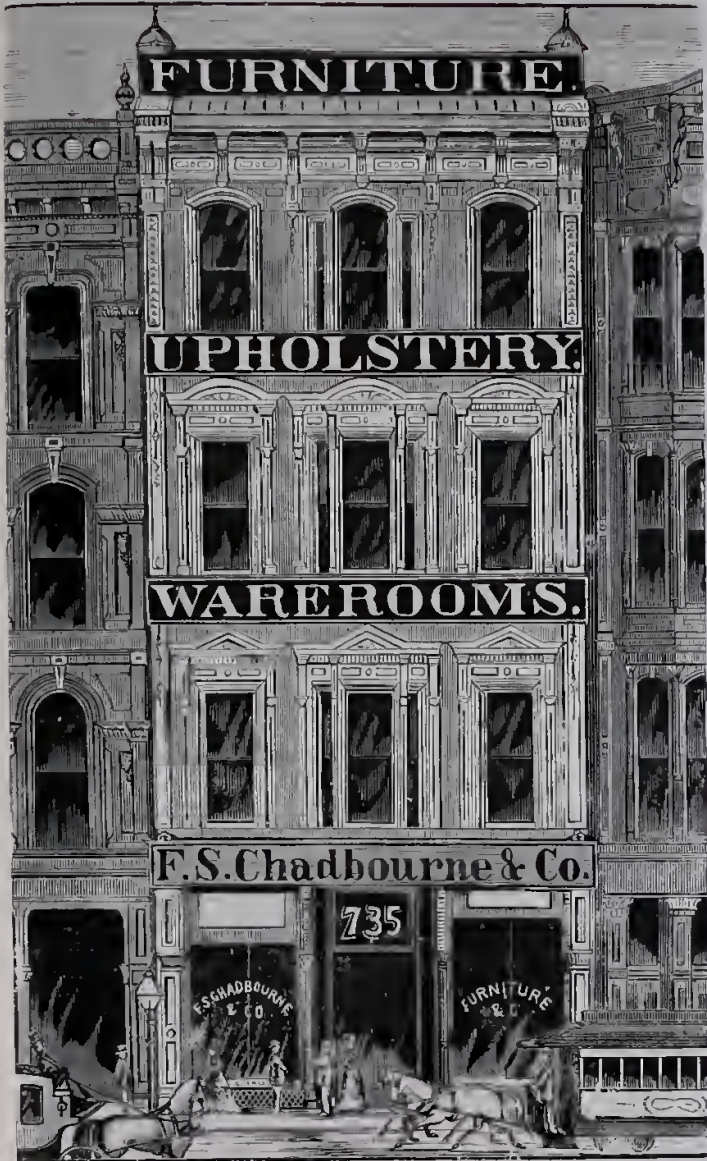
It gave the highest per cent. of power (91.02 per cent.) at the public test of the reaction turbine water wheels by the Idaho Mining Company at Grass Valley, commencing April 30th, 1883. This was the highest per cent. over all wheels now in use. It was at once adopted by said company. Send for Price List and Full Particulars.



SAN FRANCISCO, CAL.

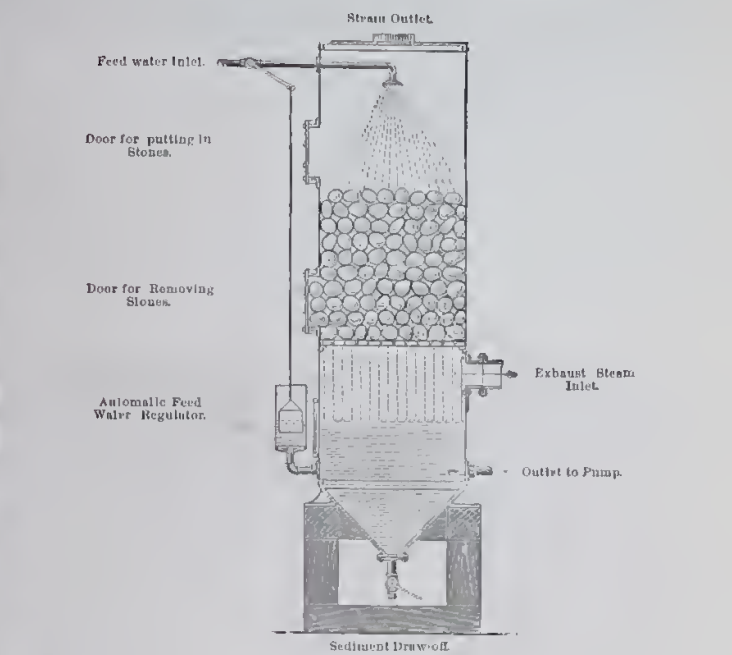


F. S. CHADBOURNE & CO.,  
741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



**IMPORTERS, MANUFACTURERS,**  
—AND—  
**Wholesale and Retail Dealers in**  
**FURNITURE AND BEDDING**  
**OF EVERY DESCRIPTION.**  
  
**Chamber, Parlor, Library and Dining**  
**Suits,**  
  
**IN AN IMMENSE VARIETY OF STYLE,**  
  
Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish  
Easy and Lounging Chairs, Etc.---Hotels and Private  
Residences Furnished.---Designs Furnished  
and Estimates Given.  
  
**F. S. CHADBOURNE & CO.,**  
741, 743 and 745 Market Street, - - - San Francisco.  
CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

**LLEWELLYN FILTER-HEATER,**  
Patent Issued Aug. 12, 1879, Re-issued Aug. 1<sup>st</sup>, 1881.  
For the Prevention and Removal of  
**STEAM BOILER INCRUSTATIONS**  
**WITHOUT THE AID OF CHEMICALS.**



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent. of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.  
Further particulars with full descriptive circular and price list can be obtained at the office of the  
**LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,**  
330 PINE STREET, ROOM 7,  
SAN FRANCISCO, - - - CALIFORNIA.  
Descriptive Catalogue Sent on Application.  
Manufacture, Columbia Foundry, 133 and 135 Beale Street.

**The California Lloyds**  
  
**UNION**  
**INSURANCE COMPANY**  
**OF CALIFORNIA.**

**THE CALIFORNIA LLOYDS**  
(Established in 1861).  
**FIRE AND MARINE**  
  
Paid-Up Capital, - - \$750,000  
  
PRINCIPAL OFFICE,  
Nos. 426 and 418 California St.  
Agencies in all the Principal Cities of the  
United States.  
  
G. TOUCHARD, President. N. G. KITTLE, Vice-President.  
JAMES D. BAILEY, Secretary  
O. P. FARNFIELD, General Agent  
GEORGE T. BOHEN, Surveyor

**M. T. BREWER & CO.,**  
Nos. 30 and 32 J Street,  
SACRAMENTO, - - CALIFORNIA  
  
COMMISSION MERCHANTS & WHOLE-  
sale dealers in Foreign and Domestic Green  
and Dried Fruits, Produce, Honey, Nuts, Garden  
and Flower Seeds. Please give us a trial. 30 and 32  
J Street, Sacramento, Cal.  
  
**WISE** people are always on the lookout for  
chances to increase their earnings, and in  
time become wealthy; those who do not  
improve their opportunities remain in poverty. We  
offer a chance to make money. We want men, women,  
boys and girls to work for us right in their own local-  
ties. Any one can do the work properly from the first  
start. The business will pay more than ten times ordi-  
nary wages. Expensive outfit furnished free. No one  
who engages fails to make money rapidly. You can de-  
vote your whole time to the work, or only spare mo-  
ments. Full information and all that is needed sent  
free. Address, BRINSON & Co., Portland, Maine.

F. P. BACON, Pres. C. L. FOUTS, Sec.  
**THE**  
**Globe Iron Works Co.**  
  
FOUNDRY,  
  
MACHINE SHOP,  
  
and FORGE.  
  
Manufacturers and Repairers of all Kinds of  
**MACHINERY AND IRON CASTINGS,**  
Hoisting and  
Mining Machinery,  
**LOCOMOTIVES.**  
Portable, Stationary and  
Marine Engines.

**BISHOP'S ECONOMICAL MINING**  
**PUMP APPARATUS,**  
  
Which does away with Cumbrous Pump  
Rods, V Bobs and Balance Rods, operating  
equally well in shafts or inclines, admitting  
of deflection into distant workings. Circu-  
lar furnished free, upon application.  
  
AND  
**MINING HORSE-POWER AND**  
**QUICKSILVER FEEDERS.**  
**SPECIALTIES.**  
**PATENT AIR COMPRESSORS.**  
  
222 and 224 Fremont St.,  
Between Howard and Folson  
**San Francisco.**



## FUTURE OF NORTHWESTERN WHEAT.

Within a few years, the area of wheat-growing, as is well known, has greatly extended in America. It has been found possible to raise this cereal in the hot air and soil of California and Texas, as well as in Dakota and Minnesota. The grain requires a good limestone soil, or something equivalent to it, and with this as a foundation, it will grow from the twenty-fifth to the forty-eighth degree on the Atlantic coast and still higher up inland. Only a comparatively small portion of the United States will produce it, compared with the total area, and that area is gradually becoming exhausted. It may be said, in a rough calculation, that more than half of the ground suitable for this plant is already under cultivation, and that we shall not double what is already grown unless improved methods of culture are brought in use. It was therefore, with some apprehension that the trade heard the report a few days ago that grain was being sent over to Liverpool and Glasgow direct from Manitoba and the northern parts of Dakota, which, of course, will include the adjacent portions of British America.

With a view of ascertaining how the venture is regarded by the trade here, a *Bulletin* reporter called on a representative of one of the oldest

Mississippi River, the price of wheat would have gone up all over the world. The land of mankind is now more generally wheat flour than ever before. I can remember when in the country districts rye flour was commonly used to make bread of, but that is no longer the case. No one seriously eats bread made of rye. The wheat fields of the United States will soon be insufficient to supply the lack in the rest of the world, and I am glad that Manitoba, and the country north of the Northern Pacific Road are coming to the front."

Another gentleman, on being interrogated, said that he had known of the intention of the Canadian Pacific to favor the transportation of wheat from the western parts of British America. "The Canadian Pacific Road is not in a strong position. It lacks population. Its tracks traverse a wilderness, and it must do everything possible to reclaim the waste. Manitoba, from which a shipment was made a few weeks ago, has good natural facilities. Its winters are long and bleak, but its summers are warm and of sufficient length to insure the ripening of wheat. That plant only requires three months, and they have much more than that. It seems to be a provision of nature that wild lands, when first cultivated, shall bring forth enormous crops. Manitoba covers 123,000 square

## A GOOD SECTION FOR CROPS.

The following is taken from the *Lower Lake Bulletin*:

Since the first permanent settlement of Lake county—since the first furrow was turned by the plow, there has not been what may be called a failure of crops by reason of a drought. However severely other portions of our State may suffer for the want of necessary rains, ours has always had a supply sufficient to insure a bountiful harvest. Though our county is mountainous, "Assion piled upon Pilon," many of which are snow-capped half the year, yet those lands when not too steep are made highly productive by industry, but no power exists in man to make a climate or produce springs of waters whose medicinal properties are adapted to the healing of all diseases, physical as well as mental. The following, which we take from the *Niepa Co. Vineyardist*, published at St. Helena, is the truth in a limited space, and there is not a man, who knows the characteristics of our county, who will presume to dispute it: Lake county, the Switzerland of America, and "the true Rhine District of California," is destined in the near future to become famous not only for its clarets, wines and fruits, but, also, for its many other attractions. Nowhere can be found lovelier

ties for irrigation of garden and orchard, so that let what will happen outside of the county, it is provided for, and its people have much for which to be thankful.

## RICH SILVER DISCOVERIES.

The vast stores of minerals in the foothills and Sierras within the boundaries of Fresno county are just beginning to attract the earnest attention of miners and capitalists. During last summer a rich deposit of galena silver ore was discovered on the northerly slope of Mount Raymond near the summit, and about three miles directly east of the Mariposa big trees, and two locations were made by Messrs. Willoughby & Ganz. During the summer the work of opening out the find was prosecuted diligently by these parties, and they had here a body of ore measuring 38 feet in width and a depth of 70 feet, showing a high grade of ore with a large amount of chlorides. The ore also carries some \$12 per ton in gold. This property was supposed, at the date of discovery, to have been in Mariposa county, but a survey of the county boundaries, at a later day, shows it to be in Fresno. We are informed, by one of the parties, that the property is now under loan to George Hearst, of San Francisco, and that the work of



FORT POINT—THE GOLDEN GATE—ENTRANCE TO THE HARBOR OF SAN FRANCISCO.

houses, who proceeded to explain his views. "I note this movement with pleasure," said he, "and am glad that the area is extending. Formerly we had two principal countries to contend with in growing this grain—Russia and Germany; but the increase in population of the latter nation has resulted in her using most all of her product herself. Russia still sells largely. There is, however, a value in having grain come from a large extent of territory. The prices are more stable, as frosts, droughts, floods and insects do not act on all regions alike, and the value is made more uniform. Wheat-growing is becoming less and less in Great Britain, to which we export so much. The land is continually enhancing in price, from its nearness to large towns and the increased profits from market gardening; labor is going up, while wheat for a series of years is almost stationary. At \$2 a bushel it would be a remunerative crop there; at \$1.50, which is about as high as it can attain, the farmer has a difficulty in wading both ends most. If we were to be limited to our old wheat fields, the grain would go up here. Fields that produced thirty bushels an acre in the Golden Valley at the beginning of the century, now only raise twenty in a good year, and ten or twelve in a poor year, sometimes sinking as low as eight. Had there been a limitation of the United States to the

miles, or as large as New York, Pennsylvania and Ohio. Throwing away the land not suited for wheat, she ought to be able to produce as much as our three States do, which would be a considerable accession to the ordinary crop. It will benefit Montreal, Quebec and the Allan Line of steamers chiefly, but I see no reason for regret in this. The kernel produced there is very solid and hard, and makes excellent flour. I know but little of the progress of Canadian railways, but I believe that some of the Northwestern States will be tapped partially by them. I notice, also, that direct shipments have been made from Dakota to Glasgow and Liverpool. Every facility of this sort will stimulate the growing capacity of the Northwest and increase the power and value of the United States.—*New York Commercial*.

## A LARGE YIELD.

Alfalfa appears to be the best crop for the land in Los Angeles county, and the best crop that can be raised in any place for the use of livestock. The *Los Angeles Herald* says: Mr. D. D. Johnston, near Norwalk, has fifteen acres of alfalfa, which last year yielded two tons of hay per acre six times during the year, yielding twelve tons annually, worth \$8 per ton, or \$96 a year for a hay crop, per acre.

spots for homes than in this county with a scenery filling the eye with all that is grand and beautiful; it has a climate fully equal to the far-famed "skies of Italy." All the fruits suitable to our climate grow in as great, and in many cases greater, perfection than in any part of the State. The day is not far distant, when the valleys and hills and mountain sides will be peopled with a hardy, industrious class of citizens, thriving towns and villages will spring up, and where the dense foliage of chemical now covers the earth, the fig tree and vine will lift their broad, bright foliage to the sun and bear their luscious fruit. Lake county contains more mineral springs than the whole of Europe, and the time will come, when invalids from all climes will resort here for pleasure and health, when the tourist will never have completed his wanderings until he has breathed its life-giving air, drunk from its crystal springs, and gazed upon such panoramas of beauty as painter's pencil never yet transferred to canvases. Busy steamers now plow its lake or float like things of life on its silvery waters, and soon the shriek of the iron horse will waken the echoes on "Konocti." The splendid fields of wheat and barley now growing in this county gladden the hearts of their lucky owners, and bid defiance to the dreaded drought in other parts of the State. Numerous springs afford facil-

developing this ore body will be pushed rapidly' as soon as the materials and machinery can be got on the ground.

Late last fall several more valuable locations were made about four miles south of the Willoughby & Ganz mine, which are reported to be much more expensive and the ore of a very high grade. These new finds are producing quite an interest in that part of the county, and capitalists are already on the ground seeking investments, and many who have heretofore claimed that there were no mines in Fresno county of any permanent value, are beginning to find out their mistake. Hardly a day passes but we hear of some new discovery, and we are persuaded that when there exist such a vast quantity and variety of valuable minerals, as are now being brought to light, we are bound to have a mining boom in Fresno county of no insignificant magnitude.—*Fresno Republican*.

## RICH SPECIMENS.

Jerome York has just developed some exceedingly rich rock in his ledge in Shug Canyon. The rock shown us will assay away up into the thousands of dollars per ton.—*Downsville Messenger*.



# THE RESOURCES OF CALIFORNIA

J. P. D. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, SEPTEMBER, 1883.

ESTABLISHED, 1870.  
Office—320 Sanson St., Halleck Building.

Entered at the P. O. San Francisco.

\$2 PER ANNUM.  
Six Months, \$1.25—Postage Paid.  
SINGLE COPIES, 20 CENTS.  
ISSUED MONTHLY.

bronze and iron ages. It has also had its fictions, metaphysical and positive ages. It is our fortune to live in the positive or scientific, the spirit of which is progress progress progress.

Progress is stamped on the brow of every trade, profession and industry. It is seen in the manifold manufactures of the world, on the broad fields

Agriculture, manufactures, commerce, the trades and the arts and sciences are so intimately blended that the discussion of any one of them, includes in some degree the discussion of all. My purpose is to discuss agriculture, with respect to the status it has held in the affairs of the world, and with respect to the requirements of the age in which we live.

as beautiful nature gives him fruit, seed, nuts, roots, game and fish upon which to subsist. These failing, he was compelled to supplement the gifts of nature, and to this end his attention was first directed to domesticating the horse, cow, sheep, hog, etc., to use when necessity should require them, and thus he became a shepherd. The next supplementary act was to plant seed, by



NATIONAL CITY, SAN DIEGO COUNTY, CAL., SCENES IN THE TOWN AND VICINITY.

## THE IMPORTANCE AND DIGNITY OF AGRICULTURE.

An Address Delivered by The  
HON. IRVING M. SCOTT.

At the Thirtieth Annual State Fair, at Sacramento, September 13th, 1883.

MR. PRESIDENT, LADIES AND GENTLEMEN:  
The world has had its golden and silver, its

of agriculture, in the rich merchantmen, steam and sail, which infest every sea. We see it in our public schools, the nurseries of civilization and the landmarks of civil liberty, the adornment of our times and the inextinguishable blessing to our race. We see it in the happy homes of numerous as the stars that smile above them at home abroad wherever we go. It is in the age; it is in us, and of us, impelling us on.

The origin of agriculture precedes all historic record, and its locality is not known. It is quite certain that it did not precede the dawn of civilization; for tilling the soil presupposes a security of rights, beyond the restraints imposed by absolute savage life. It was the offspring of necessity; for man in savage life is not given to labor nor to store up wealth in excess of his immediate wants. He turns not to cultivating the field nor to tending, so long

causing his cattle to tread it into soft ground. When the demand upon his energies became too great, or the soil too obstinate to admit of this primitive method, genius came to his aid and invented the plough, an indispensable implement of a noble industry. Glorious children of peace and plenty, an instrument mightier in its effects upon the destinies of the world than the sword or scepter. Egyptian hieroglyphics record the use of



the plough in the valley of the Nile 5,000 years ago. A forked stick, one prong of which, six feet long, was the beam; the other, two feet long, sharpened, was the collar and share. This most antique implement of husbandry has been adopted by all the civilized and semi-civilized nations of the earth, and is still in use in parts of Portugal, Spain, Mexico and other countries, and for more than 50 centuries has thrived through this crooked stick down the ages.

It was improved by being shod with iron, when mankind became sufficiently advanced in mechanics to work metals. The Bible speaks of ploughs being "shod with socks of iron and brass," and of the good days "when swards should be beaten into plowshares." The Greeks used two kinds; one the primitive, and one on wheels. The Romans added a collar, a mold-board, and in the decline and fall of the Roman Empire the plow shared the fate of all that went to make up the glories of that once great and proud nation. Only two centuries have elapsed since improvements were made on its original form and structure. These improvements, from time to time, have kept pace with the progress of general industry. One of the triumphs of mechanic arts is the successful introduction of steam ploughing. This, with the rotary plough, seems destined to revolutionize the present system of agriculture. The successful working of these modern appliances, some of which are capable of thoroughly preparing 60 acres a day to a depth unattainable with manual power, is an earnest of what is to come.

Who shall doubt that the day is not far distant when the steam-plough, on prairie and valleys and slopes, will till the soil, sow the seed, thresh the grain, clean and sack it. "Truth is stranger than fiction." If any doubt the probabilities, none can question the demonstration. The labors of Hercules are as the efforts of a puny child compared to those of the steam engine. Laden with hundreds of tons of commerce, and carrying palaces filled to repletion with passengers, it leaves behind in the muck the swiftest steed as if it were motionless; nor are its triumphs less marked on the sea. Agriculture long plodding is to be congratulated that the steam engine, the mightiest of friends, most tractable and useful of servants ever vouchsafed to human genius, is now enlisted in her cause and obedient to her will.

The ordinary hand-plow seems to be a very simple machine, but it involves principles so abstract as to require a high order of intellect and profound learning in mechanics to understand and apply them, so that it shall do the most work with the least friction and repairs. Much mechanical skill and ingenuity have been expended on the plow in bringing it to its present state of perfection, and the field is open for yet greater improvements. Let our schools and colleges thoroughly teach their classes the principles involved in all its forms—hand, gang, rotary and steam. What has been said of the plough, from its incipency to its most approved pattern, can, in general, be applied to all the various implements of husbandry, at first so rude and wasteful of labor. It is surprising how tedious agriculture was in holding on to its clumsy and inefficient machinery. Until the last half century the chief implements of harvesting were the reaping hook or sickle, the scythe, cradle and flail. Notwithstanding, Pliny described a reaping machine in A. D. 23, and Palladius in A. D. 301, both driven by oxen, from that time down 1,400 years—history is silent. A patent for a reaping machine was taken out in England in 1799, which produced no practical results. The first successful reaping or mowing machine, was invented and patented by Obed Hussey in 1833, the chief novel device of which consists in a scalloped knife cutting between two fingers. From 1834 to 1872 1,500 patents had been obtained for improvements in reaping and mowing devices. In the meantime the number of patents for cultivators, harrows, etc., were legion. Now, the mechanics of agriculture is in a high state of perfection, while invention and experience are rapidly producing more useful implements. It is a proud boast, but nevertheless true, that more has been accomplished in the last 50 years in perfecting agricultural machinery than was done in all preceding time. And in no time since history recorded events has progress been so sure of its foothold, so firm in step, and so rapid in stride. With this review of the mechanics of agriculture, from the earliest periods to the present, let us investigate the social, commercial and political aspect of the subject.

The first word which meets our vision is *vocato*, blazoned in bold relief on the page of history goes by.

The ruling classes in all nations ranked the priest above the soldier, and the soldier above the tiller of the soil, a greater fallacy, a greater wrong could not be perpetuated upon any age, people or government. For us today justly remarks "Perfect agriculture is the true foundation of all trade and industry is the foundation of the richest States."

Pressing now to the highest eminence in the exact sciences, in fine arts, in classic literature, in the

arts of war and architecture; her temples and public buildings were models of classic taste and beauty. So true to nature were her works of art, that under the touch of the sculptor's chisel the marble was said to "warm into life." For these we honor her. But what the tillers of her soil were mostly slaves. The ancient Greek delighted in the glories of war, the allurement of political preferment, the charms of music, but considered agriculture as servile and degrading.

Rome in the days of her republican rigor sets a brighter example. To every citizen was allotted first, about two acres, subsequently six acres of land, which he was expected to till by his personal efforts. To *Hunting*, who kept the bridge well—

"They gave him of the earthen land

That was his public right,  
As much as two strong oxen  
Could plough from morn to night."

Her greatest warriors and wisest statesmen felt it an honor to earn their bread by the "sweat of their brow." Cato, distinguished for his lofty patriotism, profound statesmanship, skillful generalship, great learning and unblemished virtue, says: "I come now to the pleasures of husbandry, in which I vastly delight; they are not interrupted by old age, and they seem to me to be pursuits in which a wise man's life should be spent. The earth does not rebel against authority; it never gives back without usury what it receives. The gains of husbandry are not what exclusively commend it; I am charmed by the nature and productive virtues of the soil. In my opinion, there can be no happier life; not only because the tillage of the soil is salutary to us all, but from the pleasures it yields. Nothing can be more profitable, nothing more beautiful than a well cultivated farm." These were the proudest and happiest days of Rome, then the greatest nation that had ever existed—

"Then none was for a parly,

Then all rose for the State.  
Then the great man helped the poor,  
And the poor man loved the great.  
Then lands were fairly partitioned,  
Then spoils were fairly sold;  
The Romans were like brothers,  
In the brave days of old."

Wires of conquest filled the republic with slaves, who superseded freemen in the tillage of the soil; labor became degraded, luxury enervated the richer classes; agriculture drooped, withered, sank into decay, and the decline of Rome began.

Slavery and luxury are associate evils in the economy of a state; it is a question which is the greater evil. Slavery degrades; luxury enervates; each is an element of vice and weakness. Each is incompatible to healthful and vigorous action, to just and wise law and its impartial administration, and to the development of the higher faculties and nobler aspirations of our being.

To feudalism, a species of slavery which sprung up in the fifteenth century, and which has continued, under some modifications, down to our time, it is to be attributed the constant apathy in the minds of the tillers of the soil toward improving the land and the means of cultivation. The tenant at will had no incentive to improve his holding, for by so doing he only increased his rent and not his profit. The feudal system precluded efficient agriculture. Its relics are still a bane to England. The uneasy and restless condition of mind with the masses of the people throughout the British Empire, growing out of the social and legal relations between the owner (virtually feudal lord) and the cultivator of the land, presages that the time is not far distant when the long-suffering and oppressed people will rise as a giant in his might and free themselves.

It is an unhealthy condition of affairs in any state when the lands are owned by a few, or when the masses are landless as they are in the British Empire. The English statesmen see this and acknowledge the evil, recognizing the truth of these lines by Goldsmith:

"Princes and lords may flourish and may fade,  
A breath can make them, as a breath has made;  
But the bold yeomanry, a country's pride,  
Once gone their place can never be supplied."

It behooves us to profit by the lesson of our transatlantic friends, and not suffer our public domain to be squandered on bold and reckless speculators, but parcel it out to the tiller of the soil so as to effect the greatest good to the greatest number, by so doing the ends of justice will be attained, and the Government strengthened. The human heart loves its own. Make the tiller of the soil its owner. He will love it, and fight for it to the last, because it is his own, a part and parcel of himself. Let the Government see to it that each only shall only enjoy its bounty. The owner of the soil, feeling his interest allied with the best interests of the country, and being a freeman is naturally a supporter of free labor and free institutions, he is an enemy of freedom.

The farmer, in the comprehensive use of the term, that is, the representative of all the various branches of soil-tilling and its concomitants, wood-growing and cattle-raising is little subject to the fluctuations and annoyances of speculation and the hazard of adventure, hence looks

uniformly a peaceful life—dependent of all except his personal care, willing and required labor, the gentle rains and genial warmth of the sun to quicken the sown seed, irrigate the plant and ripen the crop. His soil is rewarded with prosperity and a happy home. His children, educated to habits of industry, economy and temperance in all things, to enjoy the expanse of the country, and breathe the pure air of heaven, grow up in the health and vigor of body and mind, and come to adorn society, and honor the state by their intelligence and executive ability. If the lessons of the farm pervade less to the masses, than do those of the city, they nevertheless inculcate that which is more substantial and of greater utility.

Webster, whose youth was spent in tilling the soil, frankly admitted that he had not the capacity to dance. He had a higher aim and attained unto it, but great as he was, he never outgrew his love for farm life.

"In ancient times the Sacred Plow employed  
The kings and awful fathers of mankind!  
And some, with whom rarest parent taught his tribes  
Are but the beings of a summer's day.  
Have held the scepter of empire, ruled the storm  
Of Mighty War! then with victorious hand  
Disdaining little deities, seized  
The plow, and greatly independent scorned  
All the vain shows, pomp, and courtly ways.  
Ye generous men, venerate the plow,  
And on your little and long withdrawing veils,  
Let autumn spread his treasures to the sun  
Luxuriant and undimmed! As the sea  
For through his account, and boundless domain  
Your country owns, and from a thousand shores  
Waste all the pomp of life man may pour;  
So with superior bloom may your rich soil  
Exhibit nature's better life, and sing your  
Of every land, the noble nations' plow  
And be the exhaustless granary of the world."

The history of the United States seems a romance more wonderful than the Arabian Nights, rather than the sober record of events. But a few centuries have elapsed since the Eastern Continent bestowed her highest forms of civilization upon her twin sister of the west. Where once layed the council fire of the squallid savage, now stands the State house of civilized man. Then the country of our fathers was but a speck upon the surface of the earth. Now our country spreads out its ample domain from the Gulf to the Arctic and from the Atlantic to the Pacific. A nation of united sovereigns, fifty millions strong, and which at the end of this century will number a hundred millions. Agriculture must not only be commensurate with the requirements of this vast population, but must minister, through the aid of commerce, to other people and other nations.

In the last decade the population of the United States has been: 14,000,000, from forty-two million tons to eighty-one million tons; of coal, in 1870, thirty-three millions tons, in 1880, seventy-one million tons; of iron, in 1872, two million eight hundred thousand tons, in 1880, four million three hundred thousand tons; while the value of exports in 1872 was two hundred and fifty-four million dollars; during eleven months of 1880-81, it was eight hundred and eighty-four million dollars; of railroads, in 1871, there were fifty-six thousand three hundred miles, in 1880, eighty-seven thousand one hundred completed, ten thousand in construction, and forty-one thousand projected, sufficient to girdle the earth five and one-half times; while manufactures, in 1879, amounted to three billion three hundred and sixty million dollars; in 1880, five billion three hundred and seventy million dollars, exclusive of gas, malt, and spirituous liquors and petroleum. From 1848 to 1881 the gold product of California was \$1,155,000,000, which is fully double the entire quantity in circulation in the world prior to Marshall's discovery of gold in 1848. Of this \$900,000,000 was taken from ancient river beds, the work done amounting to but little more than prospecting. The impetus given to the world by this addition to its circulating medium and standard of exchange has been shared by every branch of industry, and the results consequent upon the gold product of California have been incalculable and have surpassed all our conceptions. It buys and stocks our farms and ranches; it pays for the labor to plant and harvest our crops; it builds our factories, furnishes the raw material and settles the cost of fabrication; it loads the ships that take away our products and return in exchange the products of every clime. The magnitude of this subject, and the present relation of farmer and miner, seem to justify the interposition of the Government, which I believe can and will adjust the rights of both without injury to either, "a consummation devoutly to be wished."

From 1870 to 1880 the population of the United States increased 11,600,000, which is 3,350,000 greater than during any other decade since the signing of the Declaration of Independence, and 7,000,000 greater than the average increase for decade.

From 1872 to 1882 there were granted 131,468 patents for new and useful inventions, and 5,397 reissues, showing that genius and science were in concert of action toward perfection in the material things of life. These statistics furnish useful lessons and problems to us all. Are we able to grapple with and master them?

In view of the progress of the age in the various

departments of industry, the written works of science showing how to best utilize the forces and materials of nature, and the certainty that all the tillable lands will ere long be occupied and under cultivation throughout the Union, the duty and position of the American farmer assume a grave aspect. His personal ease may seem to require him no further than to reap what is in sight. This policy will not in the end produce the best results. Cupidity was much eluded at the result of having killed her hen which laid the golden egg. Already the complaint is heard that the lands of California do not produce as well as formerly; that visible exhaustion and premature old age have come upon them.

The vegetable creation, like the animal, must have a full supply of good food to yield its best work. As well attempt to run the steam-engine without fuel as a farm without manure. All nature is subject to the laws of equilibrium. We do but borrow the product of the land; the debt must be paid, or we lose our credit and the land becomes bankrupt; the soil demands an equivalent for every pound of grain taken from it.

"Coming events cast their shadows before them." It requires not the vision of the seer to perceive that the near future will tax the full capacity of all the tillable lands of California to support their occupants and supply the increasing wants of our manufactures and commerce. England, with her population of 40,000,000, raising but about one-half of her requisite cereals, looks to the United States to assist in supplying the deficiency. The overworked Orient, with her teeming millions, depends upon the Pacific Slope as her granary.

Until recently France supplied the world with wine; the product of her vintage put into forty-gallon casks of ordinary form and placed end to end would encircle the globe. To-day the ravages of the phylloxera have so seriously affected this product that the world looks chiefly to California as its future source of supply. The grape here, under intelligent culture, can be made to exceed in quantity the greatest yield of France, which in a good year, exceeds 1,500,000,000 gallons. To meet these multifarious requirements is the mission of the tillers of the soil. A thorough knowledge of the art and science of agriculture in all its varied branches is indispensable to the farmer.

To develop from seed and soil the maximum value of useful plants and useful animals at minimum cost, cannot be accomplished unless the farmer shall have a clear and comprehensive understanding of the nature of those materials and agencies which produce the plants and increase his herds. He must be able to determine whether the soil he tills is defective and how he can best remedy it. He must be able to supply what food a plant lacks, whether ammonia, or a phosphate, or water, or other substance. If water is needed, irrigation must be used; if there is too much water, the land must be drained.

It is the province of agricultural chemistry to determine the faults and point out the remedies. It acquaints us with the fittest food for each of the useful plants and useful animals; what plants are exhaustive and what enriching to the soil; how best to reconstitute a soil depleted by the removal of crops, and how to keep it in a healthy condition at a minimum cost; What food is best calculated to build up the animal frame, clothe it with muscle, cartilage, nerve and flesh, for the purposes of fleshness or labor, or for milk and fattening. It acquaints us with the physical conditions of the soil, with respect to the degrees of subdivisions, porosity, dryness and depth most favorable to the application of fertilizers and to vegetable growth. It acquaints us with the best methods of manufacturing lime and other materials into valuable manures, and with the best means of utilizing the sewerage and refuse of cities, and all matter possessing fertilizing properties. Agricultural chemistry embraces a wide range of natural sciences in its application to vegetable and animal productions. It is one of the useful sciences developed in the last fifty years. Prejudice against innovation has delayed a full enjoyment of the benefits agricultural chemistry is capable of conferring. But "truth is mighty and will prevail." Agricultural chemistry rests upon a firm foundation and ranks among the most useful of modern sciences. It is the farmer's best friend, whose virtues he should fully understand and cherish.

The world has designated Mechanics, Law and Divinity as the *learned professions*, but it is fast finding out that it requires full as much talent and severe study to acquire a proficiency in the art and science so far from as to require a knowledge of the *distinguished* professions.

Tyndall says "the discoveries and generalizations of modern science constitute a poem more sublime than has ever yet been addressed to the imagination. The natural philosopher of to-day may dwell amid conceptions which baffle those of Milton." Modern science based upon natural experiment, speaks whereof it knows. The science



of agriculture consists of useful knowledge derived by experiment and by practice on a large scale. By means of it will depend the development of the resources of California to their fullest extent—to perfection. Quoting again Laeag: "Perfect agriculture is the true foundation of all trade and industry—is the foundation of the riches of States." It is the highest duty of the individual and of the State, to gather, foster and propagate this science capable of conferring blessings so great and multifarious. How is it to be done?

knowledge, whether it descends from divine inspiration or springs from human sense, would soon perish and vanish to oblivion, if it were not preserved in books, traditions, conferences and places appointed, as universities, colleges and schools, for the receipt and comforting of the same." California, appreciating the transcendent value of this most "excellent liquid of knowledge," founded, by the aid of the Act of Congress of 1862, the University of California, of which the College of Agriculture, by the expressed provisions

versities. And to this summary is to be appended, tuition free. The doors of this University stand wide open, inviting the sons and daughters of California to enter and partake of its bounteous blessings. The learned professors and their associates, are in readiness to cordially greet them, and to lead them by pleasant paths into the rich and beautiful fields of science and art, and to assist them in gathering freely therein, the abundant gems of knowledge which increase with usefulness and brilliancy the more they are worn.

the aspiring youth, not surpassed by any other occupation in life. Besides, "man is but what he knoweth." It is a fact established in modern science, that force as a quantity is constant, but is subject to change of form. Now he who changes in a fair proportion the form of force existing in wheat, grapes, pumpkins and other products of the soil, in cattle, horses, sheep and goats, into the form of brain force or useful knowledge, is a benefactor, not only to his offspring and himself, but also to the public.



AUTUMN IN THE MOUNTAINS.

Bacon, on proficiency and advancement of learning, says: "As water, whether it be the dew of heaven or the springs of the earth, doth scatter and lose itself in the ground, except it be collected in one receptacle where it may by union comfort and sustain itself, and for that cause the industry of man hath made and framed spring-heads, conduits, cisterns and pools, which men have accustomed likewise to beautify and adorn with accomplishments of magnificence of state, as well as of use and necessity, so this most excellent liquid of

of said Act, was to constitute the most important feature. This University is situated in one of the most healthy localities in the State, with ample grounds, tastefully laid out and skillfully cared for; its buildings are substantial and adapted to the purpose for which they were designed; its scientific apparatus is in keeping with the most advanced state of learning; its collection of specimens in the various departments of science are choice and extensive; its officers, professors and tutors compare favorably with those of other Uni-

"Our fortune rolls as from a smooth descent,  
And from the first impression, takes the bent;  
But if unseized, she glides away like wind,  
And leaves repenting folly far behind!"

In consideration of these advantages and the ability of our farmers generally to give their sons and daughters a collegiate education, it is a matter of surprise that so few avail themselves of the proffered boon; and especially is it a matter of surprise that of the scanty number of students from the farm so small a proportion study agriculture as a profession—for it certainly offers inducements to

The progress of the age demands these changes in force forms; demands earnest scientific work in all the departments of industry, especially in that of agricultural chemistry. The machinery of agriculture has attained a high degree of perfection, and it is a great error that agricultural chemistry should be confined within such narrow limits and be so little applied in practice. The impression is too common among most classes that a collegiate education, instead of fitting one better to perform the duties of life, fills him with



## SANTA CLARA COUNTY.

## Its Beautiful Climate and Advantages Situation.

## Cities—Towns—Railroads—Educational Privileges and General Resources.

(Written for THE RESOURCES by H. Traveling Agent, JAMES P. KENDRICK.)

Santa Clara county lies between Alameda county and the southern arm of San Francisco bay on the north, Stanislaus and Merced counties on the east, San Benito county on the south, and Santa Cruz and San Mateo counties on the west. It is 51 miles in length and has an average width of 31 miles, and an area of 1,125,760 acres, divided into mountain, hill and plain. The beautiful Santa Clara valley, so marvelous in its fertility, constituting the latter portion. Its location is very advantageous, the distance from its center to San Francisco being but 55 miles, while the two divisions of the Coast Range, between which it lies, protect it on one side from the cold winds that sweep across the ocean, and on the other from the chills of the Sierra and northern of the plains.

The soil is principally a rich, black, sandy loam, which yields from 25 to 30 bushels of wheat to the acre. Till within a few years, the higher sections or foothills were considered only fit for grazing, and used solely for that purpose; but experience has demonstrated that these lands, even to the very tops of the mountains, are admirably adapted to fruit culture, in fact they are considered fully equal to the very best in the State, especially for apricots, prunes, cherries, pears, peaches and grapes, and are identical the whole length of the county, in what is known as the warm belt, which has an average width of twenty miles, almost totally exempt from frost.

On the western side of the county, at the very summit of the mountains, are several of the finest orchards in the State, the fruit of which is of a very superior size and flavor. In fact, to sum the whole matter up, but an exceedingly small portion of the aggregate can in any sense be considered waste land, that even being covered with a thick growth of valuable timber.

The present population of Santa Clara county is 35,000, and the assessed value of property, exclusive of railroad assessment, \$28,352,121. The railroad assessment in 1892, amounted to \$1,315,547, and it will not, in all probability, be less this year, so that the total amount will reach \$29,567,468, showing a real gain of \$3,552,522.

The whole county, in general terms, seems to be especially adapted to fruit-raising. Within the past three years several large farms have been subdivided, and a great number of newcomers have purchased lands and entered upon the business of viticulture; especially is this the case in the vicinity of Los Gatos, the distance between there and San Jose being some ten miles, almost all of which is a continuous line of fruit orchards. There are several very extensive fruit canneries in the county, three of which are located at the latter place and one at the former.

The great want of Santa Clara county however, is manufacturing establishments that will give employment to her surplus young men, boys and girls. As it is, she imports all her shoes and most of her other goods. It is the old story, selling raw material and importing manufactured. This is a ruinous policy, whether pursued by an individual, State or nation, and the sooner it is abandoned forever the better for all concerned. And here let me say, that the great underlying trouble is that the original settlers came to make their fortunes and then return to their homes in the East. California was a fat goose to be plucked, an orange to be skinned and then discarded, and never, until now people come here to make their homes, can this wretched state of things be changed for the better. What makes the matter worse is the fact that these early comers are the ones who now own the land and have the capital. Who hold the reins, and it is not in their nature to do anything, scarcely, to advance the interest of the State, they being first, last and everything on getting Shylockian interest, without any especial trouble to themselves. Let the reader contrast the situation as presented, on the one hand by California, and on the other by Oregon and Washington Territory. There, all is intense activity and enterprise. Real estate sells quickly and advances rapidly. Improvements are visible on every hand, money-making being the order of the day. And why all this? Because the people are made to, and have gone there to stay. To make home and found an empire. There to live and die, and spend their lives in promoting all that will aid in the development of the Great Northwest. The men, however, who originally came here had in such ideas, and we can look to them absolutely for nothing, for even less than nothing, they being as a drag to keep back our advancement. Santa Clara county would seem to have made up of the most desirable regions upon the whole face of the earth; but, I repeat emphatically, it can never be done by exporting raw products and importing manufactured. Its people are made to make educational matters, but what a young man and woman must most of all be sure of, of making a living, the former to enable himself to get

self-concent, phumones and impracticable notions. This fault, if existing at all, is not in collegiate education, but is inherent in the individual who, misled with the idea that he is a genius, mistakes the glitter of polished brass for the more subdued lustre of pure gold. He, who like Ixion, lacking a proper appreciation of his own faults, allows his presumption and indiscretions to mistake a cloud for Jove. When he shall have completed a few turns upon the fiery wheel, he will be a wiser and a better man, and a more useful member of the community than he would be without education. It is by education that we more fully appreciate how little we know and how much there is to be known. The "Prince of Philosophers," when eighty-four years of age, remarked: "I do not know what I may appear to the world, but to myself I seem to have been only like a boy playing on the sea shore, and diverting myself in now and then finding a smoother pebble or prettier shell than ordinary, while the great ocean of truth lay all undiscovered before me."

Education not only inspires industry in the mind of its possessor, but sharpens, strengthens and disciplines the mental faculties for concert of action under the direction of the will; also nurtures the judgment, so that it is better enabled to counsel the will aright. Education ennobles the mind, and impresses upon it that all honest occupations are honorable, that in labor, however humble, is enthroned true dignity. Michael Angelo said every block of stone contained an imprisoned angel, awaiting some one to set it at liberty.

The educated man, fortified by common sense of right, uses those all-potent conceptions of what might seem mental labor. What matters it if he gathers eggs on the streets; so long as it is honest labor, it is honorable. The gold for which he sells his eggs is as pure and valuable as the gold which buys the rarest gem that adorns a diadem; perchance the eggs are of greater intrinsic value than the gem, for by labor they reappear in the form of paper, to whose fidelity is intrusted most of the business relations of life billions of wealth, the treasures of art and of science, the records of events, the expressions of our innermost thoughts, and the inspirations of divine wisdom and of godliness.

As the sturdy oak is developed from the acorn, the lofty pine or mammoth sequoia from diminutive seed, so the various useful industries, however huge their present proportions, have been developed from small beginnings. Others of like character will spring up, flourish, and perchance excel in magnificence any now in operation.

The educated have an immense advantage over the uneducated in comprehending an industry in its length and breadth, in its minutiae and estimate, and are more likely to attain success. But education alone is insufficient to secure satisfactory results in any undertaking; there must be native talent at the foundation. A good watch-spring cannot be made out of lead, however much it may be hammered, rolled and polished; neither can an efficient workman, in any profession, be made out of dull and inert material. The achievements of success are attained, for the most part by those who understand the relations of things, and hence seldom err in their deductions from any given state of facts. In isolated cases blind fortune may make millionaires of beggars, or beggars of millionaires, but in general, man is the maker of his own fate. Possessing fair abilities, he, by observation and close study of science and art, is enabled to utilize the forces and materials of nature so as to secure maximum results at minimum cost. Then and not till then, is he truly practical. A term, too often sadly placed by being employed for purposes alien to that of AEsop's lion's skin, but the fat of nature has gone forth. "The fittest survive." Lion's skins will not ward their wearers in these days of enlightenment. Different vocations require different orders of talent and culture, and as the kind and fitness of a mind is contained in a mineral mass are most readily determined by chemical or optical tests, so the kind and quality of talent of our sons and daughters are best demonstrated by systematic study; according to the kind, quality and quantity of the talent itself they shall yield, will they be estimated in the treasure of the world. The talent of the child is not due to his birthplace nor to the possession of his parents. The farmer's son, by talent, may be best adapted to the practice of law, or of medicine, or of divinity, or of mechanics; or the son of the mechanic, lawyer, doctor, or doctor may be best fitted by nature to pursue some other profession than that of his parents. Let every legitimate vocation be exhausted before certain the character of the talent with which he is endowed; then cultivate it faithfully. Let not ambition or false pride thwart the plan of nature or will of heaven. For "swelling ambition which sways itself, falls on the other." If he develop a talent and taste to be a blacksmith, wood worker, or useful mechanic of any sort, or a farmer, let him be a blacksmith, whysayright or farmer, and let him Godspeed. For they are all the

noble sons of honest labor, largely the home and sine, nerve, life blood, mind and soul of all that is most useful, beautiful, grand and glorious on earth. By their efforts we subsist, the granaries of the world are filled, cottages, palaces, temples of learning and worship, vast cities are all the work of their hands; the necessities and luxuries of life are the fruits of their toil, the vast armies and navies are the trophies of their design and skill. Ye mothers and fathers, throw false modulation and false pride to the shades. Give to your sons and daughters trades and professions fitted to their talents and capacities, and marsh them as live, energetic workers in the grand army of progress.

The University of California is designed and qualified to solve this most important problem of adaptability with respect to talent, trade and profession; it is a miniature of the world where the affinity of mind for those sciences and arts involved in any special occupation are determined with facility. It is a noted saying of Aristotle, "That the nature of everything is best in its smallest parts." According to the taste or natural bent of the student's mind will be his inquiries and proficiency in the various branches of learning.

"There's a divinity that shapes our ends, Rough-hew them how we will."

Let these natural peculiarities be carefully noted by the professors and tutors and be made known to parent or guardian of the student, for upon these determinations and the judicious actions thereon, will, in a great measure, depend the student's success in life.

The field of the arts and sciences endowed and cultivated in the University of California is extensive. May it be enlarged and improved till none shall surpass it in extent, fertility and hearty under the canopy of heaven. Let the individual, the State and the general Government unite their energies for the accomplishment of this superbly grand and noble object.

"Knowledge is power." Knowledge is the directing agency by which order is brought out of chaos. The first visible manifestation of the power, wisdom and goodness of knowledge was in its first, and execution thereof, "Let there be light and there was light." Now, as by this physical light we are enabled to perceive physical objects, from the most minute to the most sublime; so by the more subtle light of knowledge we are enabled to perceive the more occult truths of nature and nature's laws.

A star of the firmament is radiant with utility and beauty; it guides the shepherd with his flock upon the hills, and the mariner in his course upon the deep. To the child it seems a delightful toy, while to the philosopher it is known to be the center of a system of worlds. A constellation beaming with the splendors of many stars is proportionately a mirror for its usefulness and grandeur. But the firmament replete with stars and constellations of stars, blending their beauties and splendors into a unity of light, is sublimely glorious. So the truth of science is radiant with utility and beauty. It is a light in the obscurity of philosophy to guide us aright. The child sees but the inviting fruit in its fall from the tree, while Newton perceives and grasps the law of its descent, and places it as a glowing truth in the firmament of science to light the way on all coming time. So a constellation of many truths, circumscribed by manifold bounds, as the science of mathematics, of mechanics, of chemistry, of geology, of physics, etc., common to our education in proportion to the volume and intensity of its light for all the purposes of our being. And so in the firmament of science, as in that of the heavens, its truths and its constellations of truths, discovered and determined, blend all their lights into a glorious unity of light for the perfecting of the world's happiness and good. The masses of knowledge in the arts and sciences exists not only in theory but in practice; not only in our universities of learning, but in all the occupations and relations of life.

But while the stars shine brightest, the world sees but darkness. The stellar scene of the firmament merges into that of still higher forms of nobleness and beauty, as duty men ascending the east, influences the earth and shines with ray light, and betokens the coming of the ineffable glories of perfect light, so knowledge in the arts and sciences sees but darkness; yet is so far advanced as to perceive the moving tints of the perfect light of coming day. This is cause of most earnest congratulation to all whose aspirations delight in noble and more exalted achievements—in progress. For there is no higher degree of fulgurance known to mortal than is afforded by a consciousness of rational progress towards perfection in all that is good. The designated bounds of a specialty are nominal—not real. A specialty is but a further development of some peculiar property of man or more elements of a whole.

The agricultural, mechanical and commercial industries, the arts, trades and professions so run into each other by manifold gradations, so are blended that each is a component part of each of the others, is devoid of absolute identity, or like

heat, light, motion and electricity, each is the cause, and each is the effect of the other's existence. Thus, were the industry of mechanics to set up for itself, it would fall for the want of agriculture to supply it with food; of commerce to furnish material for its uses; of the arts, sciences and trades to produce its chemicals, to design, proportion, draw and fashion its works; and of the professions to protect its legal rights, to care for its sick and to minister to its craftsmen for their moral and spiritual good. Nor could agriculture, nor commerce, nor any other occupation, setting up for itself, succeed better without the recognition of the various other industries, trades and professions. The only elements foreign to pure gross ignorance and idleness.

As the innumerable colors from the retiring tint of violet to the most aggressive hue of red, whether seen in the painted flowers that live the leaf, or in the diverse and diverse flowers of nature's studio; or in the rich folds of peaches, and in the fields of purple and golden harvest; or in the foliage of the forest; or in the bloom of health and beauty on the cheek of youth; or in the subdued lustre of gold; or in the glorious stars and stripes that wave over and protect us; or "in the bow of promise set in the cloud"—are all contained in every pencil of light of the sun. So all the arts, sciences and occupations developed in proper proportions and to the full extent of their energies are contained in every pencil of progress.

*Proverbs of California! Sovereign power of a perfect Republic! Are ye far progress? The magnitude of your calling, the responsibilities of your present and the possibilities of your future demand it. The spirit and the requirements of the age demand it.*

## PRICES OF LAND.

Land that can be used only for pasturage may be had at from \$1.25 to \$5.00 per acre. Unimproved lands, that are sufficiently moist or can be irrigated without great expense, command from \$15 to \$30 per acre, owing to proximity to market, etc. Improved lands—lands that are under a good system of irrigation—are rated at \$40 for the land, with the value of the improvements added. Government lands are still to be met with in many portions of the county that are subject to homestead and pre-emption, but most of them will hardly be taken up until some means of getting water upon them for purposes of irrigation have been discovered. People are now looking forward to the time when fruit shall be the staple product of this locality, and as good fruit lands are the highest priced everywhere else, our fruit lands are having an upward tendency. Some of the land in the arroyos and belts has doubtless, tilled and quadrupled in value during the past two years, but it started so low that it has not yet reached a very high figure.

Our land is sold in tracts ranging all the way from five acres to five or even ten thousand acres. There are some few who do not wish to sell at present figures unless they can sell all they have in a body, but there are yet thousands of acres of the best of lands that can be had in lots to suit the purchaser. The large bodies, it is hoped, will soon be offered for colonization.

The colony system works admirably wherever it has been tried, and we are looking forward to the advent of some enterprising capitalists, or association of men of more limited means, to buy up some of these large tracts, cut them up into twenty and forty-acre fruit farms, lay off streets and avenues, bring water from the streams or bore artesian wells with which to irrigate them, and then offer them for sale to men of limited means who will raise fruit and good stock. This system will work as well upon a small scale as a large one. If four men will associate themselves together and buy 160 acres, divide it into forty-acre lots, and have one good well, they can have a small colony of their own. Tulare county now offers cheap homes for thousands, but within the next two or three years it will require a small fortune to get a forty-acre lot. A rare opportunity is now open to every one. These who are wise will avail themselves of it at once; the otherwise will think over the matter for a few years and then buy land at a hundred dollars per acre, that may now be had for twenty dollars. —*Tulare Register.*

## NEVADA COUNTY THE BEST PLACE.

O. D. Woodman, who has just returned from a six months' trip to Oregon, Washington Territory and British Columbia, informs us that Nevada county is about the best place after all. The northern country is crowded with people from all parts of the Union, and although most of the towns show evidences of thrift and prosperity, business is considerably overdone and the opportunities for the laboring classes are insufficient to accommodate one-half of those who have flocked there during the past year. William Powell, who left this city several months since, is doing well in the hotel business at Wheaton, W. T. Mr. Woodman says that in a place he has visited that he finds the people as capable or public spirited as they are in Nevada county. Business, too, seems to be about as good here as elsewhere and our people should have no cause for complaint. —*Nevada Herald.*



married, settle down, establish a home and rear that first fundamental and requisite component of a nation—a family, and the latter to get her living, if through adversity she should be left to take care of herself.

Citizens of Santa Clara county, you have a delightful region, favored beyond all precedent. See to it at once that manufactures of every description are inaugurated. Set the ball in motion, and never cease until your glorious section becomes a mechanical as well as intellectual, agricultural and viticultural portion of the State.

#### San Jose.

San Jose is the county seat, and ranks fourth in the State in point of population, the present amount, including the suburbs, being 16,000. Its location is admirable, climate delightful, and educational facilities of the very highest order; its public school system being, in all probability, second to that of no other city of its size in the Union. There are five elegant school houses, which cost from \$14,000 to \$25,000 each.

The University of the Pacific, under the control of the Methodist church, and designed to accommodate both sexes, is located midway between San Jose and Santa Clara, a line of horse cars passing its front. In addition to these is the new State Normal School recently erected inside the city limits, at a cost of \$149,000, the land upon which it stands (Washington Square), (27 acres) having been donated by the city to the State, the latter afterwards expending the sum of \$25,000 in order to improve the grounds.

There are, also, several boarding and private schools, ably conducted and presided over by full corps of teachers, and finally the Garden City Commercial College an institution similar every way, to those located in San Francisco and other cities.

San Jose is lighted by electricity, there being five high masts and one immense tower, which present a very beautiful appearance.

#### Hotels.

The city can boast of several very fine hotels and restaurants conducted in every respect the same as those to be found in the metropolis. The Anzures House presided over by E. Dillroy, Esq., has ample accommodation for 175 guests. The charges being two dollars, two and a half and three dollars per day, according to style of room. It is located upon Santa Clara street, the great thoroughfare of the city, the table being supplied with the very best staples and luxuries furnished by the San Francisco and San Jose markets.

The Saint James is also a splendid house, the proprietor being Tyler Beach, Esq. He has accommodations for one hundred guests. Fine large airy rooms elegantly furnished, and a table that is first class in every respect. All in quest of luxury and delightful surroundings will do well to give him a call. The hotel is located on First street a short distance from the rail road depot, opposite St. James Square, with free coach to and from each train.

A few doors above is the New York exchange kept by P. Warkentin & Co., located upon the corner of First and St. John streets. It can accommodate 250 persons. This is the general stopping place for the average travelers. Clean beds, fine rooms, plenty of well cooked food, served in first class style and low prices, 25c for a single meal, \$1.00 to \$1.50 per day, and \$5.00 to \$8.00 per week for board and lodging. Free coach to and from the railroad depot.

The Pacific Hotel is located on Market Street (Nos. 373 and 375), and is said to be the most convenient house upon the whole Pacific Coast. Board is from \$5.00 to \$7.00 per week; single meals, 25 cents; \$1.00 to \$1.50 per day. The first great want of the dust-begrimed guest is a good bath, and this the proprietor, Charles M. Schell, Esq., furnishes free. He also keeps a blackboard in order to assist working people to obtain employment, his house being emphatically the workingman's home. Mr. Schell is evidently the right man in the right place.

The Lick House is located upon the corner of First and San Fernando Street; the proprietors are C. B. Corey and I. K. Roberts. It is kept as a first-class hotel, the charges being 50 cents a meal, board, with room, \$1.50 to \$2.00. The firm have just furnished a new addition, adding 21 more rooms. One great advantage of which is that they are all on the first floor, climbing stairs being obviated, and quick egress in case of fire. It is particularly adapted to families enjoying or boarding in the city.

The Rias House, an excellent hotel, is kept by John Barry, Esq., and is situated upon the corner of San Antonio and First Streets. It is conducted in a home-like manner, and is first-class in every respect, the rooms being very fine. The house, a brick one, is new, and fitted up with a view to real home comfort and luxury. The table is surpassed by none in the city, while, at the same time, the charges are very moderate, the rates being from \$1.00 to \$10.00 per week for board and room. Excellent bath rooms are also connected with the house, and a free coach to and from every train.

#### Fredericksburg Brewery.

This establishment is, with one exception, the largest in the State. The buildings cover a space of 2½ acres. It consumes 25,000 bushels of barley per year, and keeps constantly on hand 15,000 barrels of

beer. It is the only brewery upon the coast that uses an ice refrigerator in order to keep the beer cold, the one there having a capacity to manufacture 25 tons per day, and was made in Chicago by the Boyle Ice Machine Company. The whole establishment is fitted up with every possible modern appliance, and in one month from the present time will commence to export beer to every portion of the coast as well as foreign markets.

#### Canning Factories.

There are three in the city, viz.: the San Jose, Golden Gate and Dawson, the former being one of the very largest in the world. San Jose has also several foundries, a broom factory and one small shoe factory.

The carriage manufactory, established by W. T. Adel (at 263 First Street), called the City Carriage Factory, is turning out some fine specimens of family carriages, top and open buggies, rockaways, and light and heavy wagons.

James A. Clayton, the principal, as well as veteran, dealer in real property, has his office at 288 Santa Clara Street. He has resided in the county for a period covering 31 years, and is probably the best resident judge of the true value of real estate in both city and county, having been constantly engaged in the business during the past fifteen years.

San Jose has a decidedly metropolitan appearance, the stores and other buildings, particularly upon the two great streets, First and Santa Clara, being similar in appearance to those found either in San Francisco or Chicago. Upon Market Street, the firm of Lemone, Turle & Co. have a store 150 feet in depth by 100 in width, with an additional wing of 60 feet, under the whole of which is one vast wine cellar, filled to its utmost capacity with California wines and brandies. Their stock consists of groceries, grocery and glassware, boots and shoes, hats and caps, paints and oils, hardware, farming implements and machinery, while over head, in the second story, is located the coffee and spice mill and immense grain depository.

#### Buildings, Etc.

The County Court House is probably the finest in the State and was erected at a cost of \$200,000. It is the Corinthian style, with a facade one hundred feet wide and eighty high. The building is surrounded by a dome, from whence a magnificent view of the city, and surrounding country can be obtained. Adjoining the Court House is the County Jail, which cost upwards of \$80,000.

There are in all fifteen churches including Catholic, Episcopal, Congregational, Baptist, Hebrew, Methodist, (North, South and German), Presbyterian and Friends.

There are seven newspapers, the *Times*, *Herald*, *Advertiser*, *Item*, *Headlight*, *Pioneer*, and *German Courier*, the two latter being weeklies. Five Masonic lodges, five Odd Fellows, one Red Men and a Free Public Library, besides one Knights of Honor lodge, one Good Templars, one Sons of Temperance, and one Red Cross.

The assessed valuation of city property is \$10,000,000. The water supply derived from the Santa Cruz Mountains is very ample, and of great purity, and besides this, there are a great number of fine flowing artesian wells.

#### Gilroy.

Gilroy is next in size to San Jose the population being about 4,000. Dairy ranches abound all the way to San Juan, fruit raising and agriculture not being so general as in the northern portion of the county. It has one principal street, which is well built up, and a great number of very pleasant homes. There are several good hotels, and restaurants, and besides churches and school houses, there is a seminary for the education of the canine species, presided over by professor Thomas Hildebrand, the tuition charges being \$100. per term.

#### Gilroy Hot Springs.

Are located some 12 miles east of the town, and are considered among the very best in the State. They are delightfully situated in the foot-hills on the Coast Range, having a very fine hotel, and great number of tasty, and elegantly furnished cottages for the accommodation of guests. The scenery in the vicinity is decidedly picturesque, and the view obtained from several points upon the road leading to them, very charming.

#### Los Gatos.

Is located ten miles from San Jose, upon the line of the South Pacific Coast Railroad, (narrow-gauge), at the base of the Santa Cruz Mountains, in the region of the warm belt before alluded to. It is a very lively place, the inhabitants being up and doing. They are people who have gone there to stay. To make a home, and develop the grand resources of their highly-favored region. Fruit raising is the principal pursuit, and in a few years it will have become one of the most celebrated localities in the State. During the year its real estate has experienced quite a boom, sales having been made in all directions.

The Los Gatos Fruit Cannery is one of the largest in the county, and has done much to encourage the raising out of fruit. At the present time it employs some 300 hands, its goods standing very high in the market.

The Los Gatos Flouring Mills turn out 500 barrels of splendid flour every 24 hours, and is fitted up with the very best machinery the present

age is able to furnish. It is built of cut stone, the original cost being \$100,000.

Three miles from the town is the Alma Hotel, a much frequented summer resort.

#### New Almaden.

Is a very bustling little mountain town situated at the New Almaden Quicksilver Mine. It is twelve miles distant from San Jose, the connection being made by stage.

#### Saratoga.

Is also located on the western side of the valley, in the warm belt, and possesses a most delightful climate. It has several paper mills, and a great number of quiet, vine-clad, cozy homes that excite of all who pass that way.

#### Alviso.

Is located at the northern end of the county, at the head of San Francisco bay, and is a general shipping point. It has but a small population, but owing to its great facilities for handling freight, is quite a busy place.

On the eastern side of the valley are the towns of Milpitas, Berryessa and Evergreen, all of which are small, but still very charming places. They, too, are within the warm belt; the Central Pacific Railroad passes through the former town, thus bringing it within an hour and a half of the metropolis.

#### San Jose.

Is situated three miles from San Jose, the beautiful Alameda connecting them, but as the intervening space is all built up with elegant and costly residences, the two places are now considered almost the same as one. This is also the locality of the celebrated Santa Clara College, one of the most complete educational institutions in the State.

Mountain View and Mayfield are both situated upon the line of the Southern Pacific Railroad, and are thriving, busy towns, each being the center of a very rich agricultural district, and within one hour's transit of the City of San Francisco.

The time must, and soon will come, when the rich bottom lands and magnificent foothills of Santa Clara county will be subdivided in 20, 10 and 60-acre tracts. When that day shall have arrived, it will become the home of a vast population of what might be termed the happiest people on earth. As I said before, the county needs manufacturing establishments, several more canneries and a great number of fruit-drying establishments, so that there need be no waste whatever of the fruit when ripe.

Having three hours of railroad connecting it with San Francisco, the time will certainly come when it will be looked upon, every acre of it, as suburban property, and will be valued at a corresponding figure. Ten acres of grape vines, on either side of the valley (within the warm belt), will afford an income of at least \$1,000 a year. With ten more, for other purposes, the farmer would have a delightful home, and absolute certainty of making a good living for himself and family, free from the physical trouble he read of daily in the telegraphic reports, for tender, there are no cyclones in Santa Clara valley, and the Southern Pacific Railroad's trains are never lifted up and dashed to pieces by the wind, as was the case in Minnesota only a few days since. Ten acres to grapes, five in prunes and five more for house garden, hay and pasturage, and what more could any reasonable man desire, and where in all the world could so great a space of comfort and true happiness be found as in such a home in Santa Clara county.

#### INTERESTING FACTS.

Tree-planting has been increased in this county from year to year. Of some kinds of nursery trees, our dealers have scarcely been able to furnish a supply. In a recent interview with Mr. Joseph Sexton upon this subject, we learned that the demand for fruit trees this year was much greater than it was last year, but not nearly so much as it would have been had early rains come.

Apricots are most in demand. Next to this the Pent prunes, soft shelled walnut, Bartlett pear and peaches are wanted. Mr. Sexton had a large run on walnuts this season. About 6,000 of this kind were disposed of by him and many more could have been sold had he had trees enough. Of the apricot about 20,000 were sold and 2,000 of the prunes. Many more prunes were wanted but they could not be had in the State.

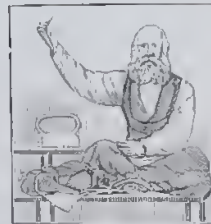
Mr. Sexton's sales were made, to a large extent, to parties in this county, but a very considerable amount of his stock was sold to parties in Ventura. Especially is this true of the apricots. Quite a large number of the walnut trees were disposed of in Los Angeles county, so that Mr. Sexton enjoys a trade reaching over a number of counties. Mr. Sexton declares that Ventura county is to be the apricot section of the coast. There is much more land there adapted to the growth of this tree than in this county. There is more soil on which they will grow, but the climate is not nearly so good as that of this county. The apricot is particularly adapted to the coast. It is the only tree that leans towards the ocean, all other fruit and ornamental trees lean from it. There is considerable planting of apricots going on at the Carpinteria. One buyer purchased 1,000 trees and another 650. Around Santa Barbara the average sales are from 300 to 400 trees.—*Santa Barbara Independent*.

#### THE FRUIT CROP.

Concerning the fruit crop a writer in the *Bulletin* of this city whose opportunities for judging are good, says:

The fruit interest is more prosperous than ever and large quantities of green fruits are being sent East. But more attention is being given each year to the raising business. It is found to be more profitable and to require less care than the business of selling green fruit, and many orchardists are establishing canneries and drying establishments. One firm in Sacramento this season put up 210,000 cans of strawberries. Apricots are the favorite fruit, as they are in great demand in the East which has few localities where they can be grown. Orchards are being established in all parts of the State, and recently the land in a whole township in Butte county was bought by persons who will establish orchards. Water for irrigation has recently been put in this township, and this was no sooner learned than every acre was purchased, although it was a considerable distance from railroad connections.

## NICOLL, The Tailor



#### JUST RECEIVED

A Fine Assortment of Foreign and Domestic Woolens for this Season.

#### CALL AND SEE OUR NEW PATTERNS!

Suits to order, from ..... \$20 00

Pants to order, from ..... 5 00

Overcoats to order, from ..... 20 00

#### MEN'S, BOYS' AND CHILDREN'S

#### SUITS AND OVERCOATS.

Manufactured by ourselves, after the Most Approved and Latest Styles, at Short Notice

#### WELL CUT, WELL MADE, STYLISH AND CHEAP.

You will do well to inspect before purchasing elsewhere.

#### CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

## NICOLL, The Tailor,

#### PHILAN'S BUILDING,

816 & 818 Market Street,

#### SAN FRANCISCO.

BRANCH STORES IN ALL PRINCIPAL CITIES.

#### THE

## NORTHERN PACIFIC

#### Express Company,

#### OFFICE:

107 MONTGOMERY STREET,

San Francisco.

ON AND AFTER SEPTEMBER 1, 1890, WILL transact a general express business, operating the following routes:

Northern Pacific Railroad and Branches, Oregon Railway and Navigation Company, Oregon and California Railroad, Pacific Coast Steamship Routes, between San Francisco, Portland (Or.), Victoria, Puget Sound and Alaska.

Will provide for transportation for all points in OREGON, WASHINGTON TERRITORY, BRITISH COLUMBIA, ALASKA, IDAHO, MONTANA, DAKOTA and MINNESOTA.

Gold and Silver Bullion, Valuables, Letters, Packages and Merchandise.

W. P. DAKES, President, New York  
W. J. FOSBROOK, Superintendent, St. Paul, Minn.  
B. U. SHIMMERS, Assistant Superintendent, Portland.  
Alex. Hartman, Agent, San Francisco.



## THE GEORGETOWN DIVIDE.

## A Brief Outline of its Wonderful Resources.

As we mentioned briefly in our last issue, it was our pleasure to accompany a party last week on a tour of inspection of the Georgetown Divide, the object being, as we were given to understand, to ascertain its extent, its resources, and incidentally the feasibility of connecting that region by railroad with the Central Pacific road at some point which, on further investigation, may be deemed most feasible, probably at Auburn or Rocklin. The project of a railroad over there is something for railroad men, or other men of means, and the future to determine; but as for the extent and resources of the country they are certainly remarkable, and well worthy a brief description in the columns of the *Herald*. Living as we have lived, so close to that region, we had never visited it before, and notwithstanding all that we had heard, its wealth of available soil, its fine water supply, and its vast forests of the finest timber, were to us a great and a pleasant surprise. What is known as the Georgetown Divide lies between the South Fork and the Middle Fork of the American river, extending from a point on the west where these two branches of the American come together, a little above Folsom, eastwardly to the summit of the Sierras. The rivers on either side diverge toward their source, embracing in the country dividing them a vast area of timber land and foothill fruit land. The town of Georgetown contains a population of from 400 to 500 souls, pleasantly located at an altitude of about 2,700 feet, and yet in a state of comparative prosperity, owing to the mining developments of the locality. It dates its origin almost as far back as the period when gold was first discovered in California; and from it the divide on which it is situated evidently derives its name. This divide is in El Dorado county, the county that attracted the earliest gold hunters; but being separated by the South Fork from the old emigrant road and the road that teamsters traveled so generally in later years when hauling freight over the mountains to supply the early miners on the Comstock, its resources, except such as were embraced in its rich placers, gravel deposits and quartz veins, remain to day comparatively undisturbed. Its timber has not been cut and hauled to the valley by teamsters as back freight, as is the case to a greater or less extent on all the divides in this range of mountains along which trans-mountain roads were cut. Its vast pine forests stand there to day in all their pristine grandeur, barring the slight encroachment made upon them by the ubiquitous stake-maker. And their extent is wonderful. From a point about ten miles up the ridge from Georgetown they extend nearly or quite to the summit, a distance of over thirty miles, and from the Middle Fork to the South Fork, an average width of about twenty five miles. These forests are estimated to cover, in round numbers, from 450,000 to 500,000 acres. The timber includes principally sugar pine, yellow pine, fir, spruce cedar and oak, the latter being abundant in places and mainly valuable for fuel. The pines stand thick and are of the finest form, many of them running to a height of over 70 yards and varying in diameter from two to nine feet. There are many trees that will make from five to eight thousand feet of lumber apiece, and yet, putting the average of available trees at 20,000 feet to the acre, the timber on that divide would make nearly five billion or five thousand million feet of lumber, and this exclusive of the vast amount of fire wood. But this is not all of the resources of that region. From the timber line, the country as a general thing, is gradually undulating; and the soil, like the soil on this divide at corresponding altitudes, is admirably adapted to the production of vines and all the staple fruits. At present the farmers over there, as a rule, content themselves with small orchards and vineyards for family use, and with raising hay; but these small orchards and vineyards demonstrate conclusively the wonderful adaptability of the soil and conditions to the production of the most prolific crops of the very best quality of fruit. For want of cheaper and more convenient market facilities, development in this line has been retarded; but with such opportunities for getting their fruit to market as would be afforded by a railroad, the possibilities of that divide, as a fruit producing region, can now hardly be imagined. The soil, as a rule, is deep, and not so precipitous but in most places it could be easily cultivated; and, as for the matter of irrigation, it is the best watered section of the State that we know of. The California Water and Mining Company's ditches cover it all, and they are always filled with clear water from sources near the summit of the mountains that are never failing. What the foothills of Placer are and are becoming as a fruit producing region, the lower portion of the Georgetown Divide can be when once it shall be favored with better transportation facilities. Nature has been generous to that portion of our neighboring county. We doubt if there is another section of the State of similar extent that produces equal resources of undeveloped wealth; and we feel confident that if the parties who are at present contemplating the project fail to put a railroad in there it will not be long until some other party will; for in a country like this, where there is so

much money seeking profitable investment, such vast resources of undeveloped wealth, so near at hand, are not going to be allowed to remain undisturbed much longer, for the want of a comparatively small preliminary outlay.—*Placer Herald* August 27th.

## THE FUTURE VINEYARD OF CALIFORNIA.

Immigration will seek and find its own level. The best lands, the most favorable climate and the cheapest facilities to good markets, will lead the great currents of immigration, and decide which county will first attract and secure the most desirable people for the State. There are many choice localities in the foothills, near the line of the California and Oregon Railroad, in Yuba Butte, Tehama and Shasta counties. These rich valleys and rolling hills will soon receive desirable settlers. Many people will travel northward thousands of miles and settle upon poorer lands than can be had in the counties named. Distance lends enchantment to the view. There are but few vacant lands in this section of the State, which are not worth taking up and planting to orchard and vineyards. Witness the changes during the last quarter of a century, and anticipate what will occur during the next 25 years. The mild and arid-tropical climate of this section of the State gives it a strong endorsement. The lands in the county of Yuba are capable of sustaining three times its present population and leaving plenty of elbow room. Adjoining counties have organized societies for the encouragement of immigration, and the same policy should be adopted here. The mildness of the climate in the foothills of Yuba, Butte and Tehama lend to them advantages not enjoyed in but a few mountain counties of any State. But the lands subject to pre-emption will not gratify the eye of the fancy farmers, but the industrious working man, with experience as a vineyardist, can not fail in appreciating them. These hills and valleys are at present in the condition nature left them, but beneath their surface lies a virtue which can not fail in making them very productive and their cultivators independent. There are lands in the foothills that a majority of people would not accept as a gift, while there are thousands of homeless and landless who would deem an opportunity to secure them extremely fortunate. In the efforts making to secure occupants for these lands there should be great care against misrepresenting their character. Immigrants should not be induced to move upon worthless lands. Immigrants who are forced to leave lands because of their sterility and unproductiveness, after being induced to settle by false representations, are grievously abused and wronged. Therefore too much care can not be taken by organized societies against deception by misrepresentation as to the nature and productiveness of lands open to pre-emption. Immigration is urged from selfish motives, and the people who invite it are liable to be prejudiced. There are many acres of tillable lands in the foothills, and there are many more acres which are valueless. Immigrants should be told the truth. It is the prevailing impression that the best foothill lands of the Sierras will be occupied at no distant day by striving vineyardists. French experts speak well of our wines, but they are of the opinion that much superior qualities will be made from the grape grown in the foothills.—*Mercury Appeal*.

## GOOD REASONING.

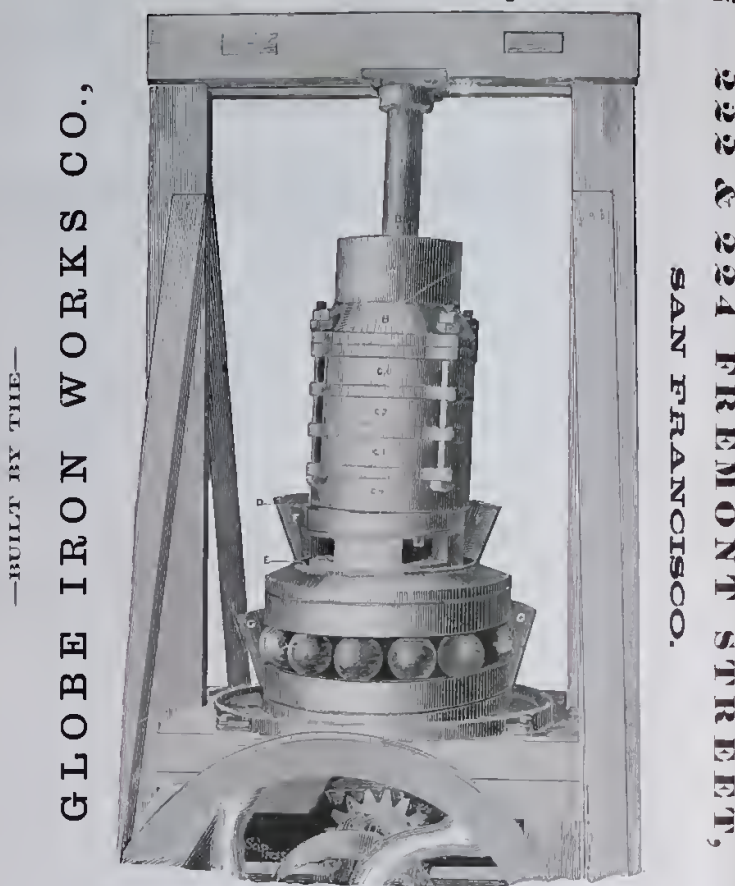
A writer in the *Daily Evening Post* of this city offers the following excellent reasons why vine growing cannot be overdone:

The population of the civilized world is increasing. If no new vines were planted wine would be scarce on that account alone. The vineyards of Europe are rapidly deteriorating, some completely annihilated by disease and old age; in fact, more are decaying annually than are planted here, or can be for the next ten years. It takes eight years after vines are planted in Europe before they bear fruit. Even then these new European vineyards cannot compete with us for the simple reason that ours is a superior fruit. The vineyard districts of Europe are so discouraged that they are not only increasing the acreage to keep pace with the increasing population, but they are even replanting the whole of their devastated vineyards. Conscientious advocates who do not indulge in the juice of the vine, can find it more profitable to manufacture their produce into raisins. If all the grapes growing in California to-day were utilized as raisins it would be insufficient to meet the demand of the United States. We would even then be obliged to import from Europe to comply with the consumption.

## WALNUT TREES.

Some twelve years ago, F. C. Graves, of Stony creek, set out a lot of walnut trees. We drove around them the other day, and found one that will measure at least four feet in diameter. The body is not very long, but we venture that the timber from it would be worth \$50. These trees have paid for the land they occupy a dozen times over with the nuts they have borne. The trees have been no trouble and have had no water.—*Colusa Sun*.

## THE DYER CANNON BALL QUARTZ MILL.



PATENTED OCTOBER 3, 1892.

We now offer with confidence the "DYER CANNON BALL QUARTZ MILL," having been fully tested by an severe use as it ever can be subjected to. We claim that it possesses more desirable qualities than Stamp or any other machine. Comparison with Stamps is always in order. Accordingly we state, that the cost is very much less, has less wear, takes less power to run and is not more than one-fifth of the weight of a Stamp Mill of same capacity. Freight is not one-fifth. Being made in light sections, can be packed by horse or mule over any trail anywhere and to otherwise inaccessible places for Stamps and other heavy Mills. It is simple, compact and strong, no complicated machinery to get out of order and the wearing parts are cheaply and easily removed. Its movement is rotary, crushing, (not grinding) either wet or dry equally well, and running in either direction the same. Runs light, makes but little noise, and does not injure by running empty. Will crush according to power used, readily geared for steam, water or horse-power, and can be run by Hardy Gurdy Wheel on Pinion Shaft, which is a very favorite method. Occupies but little space, is quickly set up and removed, and can be placed on any side-hill where there is ten feet of level ground. It will take good size quartz, discharging with Rock-breaker where it is an object and necessary. It leaves the Gold bright and easy to amalgamate, and can be cleaned up in a few minutes. The discharge is most ample and but little wear on the Screen, no coarse quartz coming in contact with it. Adapted to either upright or flat Screen as desired, or according to the work required to be done. The cost of the frame is very little and it can be constructed by any one at the place where used, thereby saving freight and packing.

We desire to call attention to the fact, that this machine develops a principle in crushing and pulverizing which is peculiar and entirely new. Briefly, it is a cylinder, in sectional and convex cones, powerfully constructed, having, mechanically considered, the same or a common central point below, while above there are two, giving the cylinder a slight oblique position; usually the ventilation is small but is regulated as required for the work to be done. In this feature rests an important element of the great force and power exerted by this machine. These two bodies, (cylinder and cone) which together we term the Rock-breaker, by a proper arrangement rest upon a series of HAND IRON RAILS in circular grooved tracks above and below, moving or rotating freely upon them turning together in the same direction, and upon the introduction of the quartz, the cylinder and cone close continuously upon it, exert a terrible force, and the rock breaks up from point to point until it finally falls out through the discharge space of such degree of fineness or size desired. From this point the crushed quartz passes beneath the balls, and is further crushed by the weight of the whole mill upon the balls, and the crushing force of the rock-breaker combined: the pulverizing is there finished and passes through the screen. It will be seen that every part of this Machine does some work, there are no idle pieces, even the weight as a whole contributing largely to the operation. Referring to the Cut: A, is a hopper through which the quartz enters the cylinder or rock-breaker. B, B', is the top section and upper shaft of cylinder, in one casting, and has no connection with the cone or machinery working the mill. C, 1, C, 2, C, 3, and C, 4, are the sections of hard iron bolted together as shown, which comprise the cylinder. The lower section C, 4 is curved inside, to correspond according to a certain rule with the cone and constitutes the principal wearing part of the cylinder, and as it does so, the section above it takes its place, and so on continuously. D, is where the crushed quartz escapes from the rock-breaker. E, where it descends to the balls, beneath which, when further pulverized, it passes through the screen. F, what is termed the Cone is not shown in the cut. It is provided with a "Shoe" to renew the wearing parts, and is the only section directly acted on by the power driving the mill.

Parties interested in the working of ores, etc., and others, are invited to call and see our Mill work, at No. 320 Fifth Street.

REFERENCES.—S. B. Drury, Iowa City, Placer County, Cal.; Eagle King Gold and Silver Mining and Water Co., Grizzly Flat, El Dorado County, Cal.; E. R. Morry, Grizzly Flat, El Dorado County, Cal.; C. H. Hankins, Grass Valley, Nevada County, Cal.; J. S. Shittman, Gold Hill, Nevada; B. I. Turman, Gold Hill, Nev.; John Robison, 1036 Market Street, San Francisco; Globe Iron Works, San Francisco, Cal.; Green & Hauser, Assayers, 520 Fifth Street, San Francisco, Cal.

## PRICES, ETC.

Capacity 1 1/2 tons, weight 500 lbs., with frame, price, \$225; Capacity 2 tons, weight 2,500 lbs., with frame, price, \$350.00; Capacity 3 tons, weight 3,000 lbs., with frame, price, \$425.00; Capacity 4 tons, weight 4,000 lbs., with frame, price, \$500.00; Capacity 5 tons, weight 5,000 lbs., with frame, price, \$575.00; Capacity 6 tons, weight 6,000 lbs., with frame, price, \$650.00; Capacity 8 tons, weight 8,000 lbs., with frame, price, \$800.00; Capacity 10 tons, weight 10,000 lbs., with frame, price, \$950.00; Capacity 12 tons, weight 12,000 lbs., with frame, price, \$1,100.00; Capacity 15 tons, weight 15,000 lbs., with frame, price, \$1,350.00; Capacity 20 tons, weight 20,000 lbs., with frame, price, \$1,800.00; Capacity 25 tons, weight 25,000 lbs., with frame, price, \$2,250.00; Capacity 30 tons, weight 30,000 lbs., with frame, price, \$2,700.00; Capacity 40 tons, weight 40,000 lbs., with frame, price, \$3,600.00; Capacity 50 tons, weight 50,000 lbs., with frame, price, \$4,500.00; Capacity 60 tons, weight 60,000 lbs., with frame, price, \$5,400.00; Capacity 70 tons, weight 70,000 lbs., with frame, price, \$6,300.00; Capacity 80 tons, weight 80,000 lbs., with frame, price, \$7,200.00; Capacity 90 tons, weight 90,000 lbs., with frame, price, \$8,100.00; Capacity 100 tons, weight 100,000 lbs., with frame, price, \$9,000.00; Capacity 120 tons, weight 120,000 lbs., with frame, price, \$10,800.00; Capacity 140 tons, weight 140,000 lbs., with frame, price, \$12,600.00; Capacity 160 tons, weight 160,000 lbs., with frame, price, \$14,400.00; Capacity 180 tons, weight 180,000 lbs., with frame, price, \$16,200.00; Capacity 200 tons, weight 200,000 lbs., with frame, price, \$18,000.00; Capacity 250 tons, weight 250,000 lbs., with frame, price, \$22,500.00; Capacity 300 tons, weight 300,000 lbs., with frame, price, \$27,000.00; Capacity 400 tons, weight 400,000 lbs., with frame, price, \$36,000.00; Capacity 500 tons, weight 500,000 lbs., with frame, price, \$45,000.00; Capacity 600 tons, weight 600,000 lbs., with frame, price, \$54,000.00; Capacity 700 tons, weight 700,000 lbs., with frame, price, \$63,000.00; Capacity 800 tons, weight 800,000 lbs., with frame, price, \$72,000.00; Capacity 900 tons, weight 900,000 lbs., with frame, price, \$81,000.00; Capacity 1,000 tons, weight 1,000,000 lbs., with frame, price, \$90,000.00; Capacity 1,200 tons, weight 1,200,000 lbs., with frame, price, \$108,000.00; Capacity 1,400 tons, weight 1,400,000 lbs., with frame, price, \$126,000.00; Capacity 1,600 tons, weight 1,600,000 lbs., with frame, price, \$144,000.00; Capacity 1,800 tons, weight 1,800,000 lbs., with frame, price, \$162,000.00; Capacity 2,000 tons, weight 2,000,000 lbs., with frame, price, \$180,000.00; Capacity 2,500 tons, weight 2,500,000 lbs., with frame, price, \$225,000.00; Capacity 3,000 tons, weight 3,000,000 lbs., with frame, price, \$270,000.00; Capacity 4,000 tons, weight 4,000,000 lbs., with frame, price, \$360,000.00; Capacity 5,000 tons, weight 5,000,000 lbs., with frame, price, \$450,000.00; Capacity 6,000 tons, weight 6,000,000 lbs., with frame, price, \$540,000.00; Capacity 7,000 tons, weight 7,000,000 lbs., with frame, price, \$630,000.00; Capacity 8,000 tons, weight 8,000,000 lbs., with frame, price, \$720,000.00; Capacity 9,000 tons, weight 9,000,000 lbs., with frame, price, \$810,000.00; Capacity 10,000 tons, weight 10,000,000 lbs., with frame, price, \$900,000.00; Capacity 12,000 tons, weight 12,000,000 lbs., with frame, price, \$1,080,000.00; Capacity 14,000 tons, weight 14,000,000 lbs., with frame, price, \$1,260,000.00; Capacity 16,000 tons, weight 16,000,000 lbs., with frame, price, \$1,440,000.00; Capacity 18,000 tons, weight 18,000,000 lbs., with frame, price, \$1,620,000.00; Capacity 20,000 tons, weight 20,000,000 lbs., with frame, price, \$1,800,000.00; Capacity 25,000 tons, weight 25,000,000 lbs., with frame, price, \$2,250,000.00; Capacity 30,000 tons, weight 30,000,000 lbs., with frame, price, \$2,700,000.00; Capacity 40,000 tons, weight 40,000,000 lbs., with frame, price, \$3,600,000.00; Capacity 50,000 tons, weight 50,000,000 lbs., with frame, price, \$4,500,000.00; Capacity 60,000 tons, weight 60,000,000 lbs., with frame, price, \$5,400,000.00; Capacity 70,000 tons, weight 70,000,000 lbs., with frame, price, \$6,300,000.00; Capacity 80,000 tons, weight 80,000,000 lbs., with frame, price, \$7,200,000.00; Capacity 90,000 tons, weight 90,000,000 lbs., with frame, price, \$8,100,000.00; Capacity 100,000 tons, weight 100,000,000 lbs., with frame, price, \$9,000,000.00; Capacity 120,000 tons, weight 120,000,000 lbs., with frame, price, \$10,800,000.00; Capacity 140,000 tons, weight 140,000,000 lbs., with frame, price, \$12,600,000.00; Capacity 160,000 tons, weight 160,000,000 lbs., with frame, price, \$14,400,000.00; Capacity 180,000 tons, weight 180,000,000 lbs., with frame, price, \$16,200,000.00; Capacity 200,000 tons, weight 200,000,000 lbs., with frame, price, \$18,000,000.00; Capacity 250,000 tons, weight 250,000,000 lbs., with frame, price, \$22,500,000.00; Capacity 300,000 tons, weight 300,000,000 lbs., with frame, price, \$27,000,000.00; Capacity 400,000 tons, weight 400,000,000 lbs., with frame, price, \$36,000,000.00; Capacity 500,000 tons, weight 500,000,000 lbs., with frame, price, \$45,000,000.00; Capacity 600,000 tons, weight 600,000,000 lbs., with frame, price, \$54,000,000.00; Capacity 700,000 tons, weight 700,000,000 lbs., with frame, price, \$63,000,000.00; Capacity 800,000 tons, weight 800,000,000 lbs., with frame, price, \$72,000,000.00; Capacity 900,000 tons, weight 900,000,000 lbs., with frame, price, \$81,000,000.00; Capacity 1,000,000 tons, weight 1,000,000,000 lbs., with frame, price, \$90,000,000.00; Capacity 1,200,000 tons, weight 1,200,000,000 lbs., with frame, price, \$108,000,000.00; Capacity 1,400,000 tons, weight 1,400,000,000 lbs., with frame, price, \$126,000,000.00; Capacity 1,600,000 tons, weight 1,600,000,000 lbs., with frame, price, \$144,000,000.00; Capacity 1,800,000 tons, weight 1,800,000,000 lbs., with frame, price, \$162,000,000.00; Capacity 2,000,000 tons, weight 2,000,000,000 lbs., with frame, price, \$180,000,000.00; Capacity 2,500,000 tons, weight 2,500,000,000 lbs., with frame, price, \$225,000,000.00; Capacity 3,000,000 tons, weight 3,000,000,000 lbs., with frame, price, \$270,000,000.00; Capacity 4,000,000 tons, weight 4,000,000,000 lbs., with frame, price, \$360,000,000.00; Capacity 5,000,000 tons, weight 5,000,000,000 lbs., with frame, price, \$450,000,000.00; Capacity 6,000,000 tons, weight 6,000,000,000 lbs., with frame, price, \$540,000,000.00; Capacity 7,000,000 tons, weight 7,000,000,000 lbs., with frame, price, \$630,000,000.00; Capacity 8,000,000 tons, weight 8,000,000,000 lbs., with frame, price, \$720,000,000.00; Capacity 9,000,000 tons, weight 9,000,000,000 lbs., with frame, price, \$810,000,000.00; Capacity 10,000,000 tons, weight 10,000,000,000 lbs., with frame, price, \$900,000,000.00; Capacity 12,000,000 tons, weight 12,000,000,000 lbs., with frame, price, \$1,080,000,000.00; Capacity 14,000,000 tons, weight 14,000,000,000 lbs., with frame, price, \$1,260,000,000.00; Capacity 16,000,000 tons, weight 16,000,000,000 lbs., with frame, price, \$1,440,000,000.00; Capacity 18,000,000 tons, weight 18,000,000,000 lbs., with frame, price, \$1,620,000,000.00; Capacity 20,000,000 tons, weight 20,000,000,000 lbs., with frame, price, \$1,800,000,000.00; Capacity 25,000,000 tons, weight 25,000,000,000 lbs., with frame, price, \$2,250,000,000.00; Capacity 30,000,000 tons, weight 30,000,000,000 lbs., with frame, price, \$2,700,000,000.00; Capacity 40,000,000 tons, weight 40,000,000,000 lbs., with frame, price, \$3,600,000,000.00; Capacity 50,000,000 tons, weight 50,000,000,000 lbs., with frame, price, \$4,500,000,000.00; Capacity 60,000,000 tons, weight 60,000,000,000 lbs., with frame, price, \$5,400,000,000.00; Capacity 70,000,000 tons, weight 70,000,000,000 lbs., with frame, price, \$6,300,000,000.00; Capacity 80,000,000 tons, weight 80,000,000,000 lbs., with frame, price, \$7,200,000,000.00; Capacity 90,000,000 tons, weight 90,000,000,000 lbs., with frame, price, \$8,100,000,000.00; Capacity 100,000,000 tons, weight 100,000,000,000 lbs., with frame, price, \$9,000,000,000.00; Capacity 120,000,000 tons, weight 120,000,000,000 lbs., with frame, price, \$10,800,000,000.00; Capacity 140,000,000 tons, weight 140,000,000,000 lbs., with frame, price, \$12,600,000,000.00; Capacity 160,000,000 tons, weight 160,000,000,000 lbs., with frame, price, \$14,400,000,000.00; Capacity 180,000,000 tons, weight 180,000,000,000 lbs., with frame, price, \$16,200,000,000.00; Capacity 200,000,000 tons, weight 200,000,000,000 lbs., with frame, price, \$18,000,000,000.00; Capacity 250,000,000 tons, weight 250,000,000,000 lbs., with frame, price, \$22,500,000,000.00; Capacity 300,000,000 tons, weight 300,000,000,000 lbs., with frame, price, \$27,000,000,000.00; Capacity 400,000,000 tons, weight 400,000,000,000 lbs., with frame, price, \$36,000,000,000.00; Capacity 500,000,000 tons, weight 500,000,000,000 lbs., with frame, price, \$45,000,000,000.00; Capacity 600,000,000 tons, weight 600,000,000,000 lbs., with frame, price, \$54,000,000,000.00; Capacity 700,000,000 tons, weight 700,000,000,000 lbs., with frame, price, \$63,000,000,000.00; Capacity 800,000,000 tons, weight 800,000,000,000 lbs., with frame, price, \$72,000,000,000.00; Capacity 900,000,000 tons, weight 900,000,000,000 lbs., with frame, price, \$81,000,000,000.00; Capacity 1,000,000,000 tons, weight 1,000,000,000,000 lbs., with frame, price, \$90,000,000,000.00; Capacity 1,200,000,000 tons, weight 1,200,000,000,000 lbs., with frame, price, \$108,000,000,000.00; Capacity 1,400,000,000 tons, weight 1,400,000,000,000 lbs., with frame, price, \$126,000,000,000.00; Capacity 1,600,000,000 tons, weight 1,600,000,000,000 lbs., with frame, price, \$144,000,000,000.00; Capacity 1,800,000,000 tons, weight 1,800,000,000,000 lbs., with frame, price, \$162,000,000,000.00; Capacity 2,000,000,000 tons, weight 2,000,000,000,000 lbs., with frame, price, \$180,000,000,000.00; Capacity 2,500,000,000 tons, weight 2,500,000,000,000 lbs., with frame, price, \$225,000,000,000.00; Capacity 3,000,000,000 tons, weight 3,000,000,000,000 lbs., with frame, price, \$270,000,000,000.00; Capacity 4,000,000,000 tons, weight 4,000,000,000,000 lbs., with frame, price, \$360,000,000,000.00; Capacity 5,000,000,000 tons, weight 5,000,000,000,000 lbs., with frame, price, \$450,000,000,000.00; Capacity 6,000,000,000 tons, weight 6,000,000,000,000 lbs., with frame, price, \$540,000,000,000.00; Capacity 7,000,000,000 tons, weight 7,000,000,000,000 lbs., with frame, price, \$630,000,000,000.00; Capacity 8,000,000,000 tons, weight 8,000,000,000,000 lbs., with frame, price, \$720,000,000,000.00; Capacity 9,000,000,000 tons, weight 9,000,000,000,000 lbs., with frame, price, \$810,000,000,000.00; Capacity 10,000,000,000 tons, weight 10,000,000,000,000 lbs., with frame, price, \$900,000,000,000.00; Capacity 12,000,000,000 tons, weight 12,000,000,000,000 lbs., with frame, price, \$1,080,000,000,000.00; Capacity 14,000,000,000 tons, weight 14,000,000,000,000 lbs., with frame, price, \$1,260,000,000,000.00; Capacity 16,000,000,000 tons, weight 16,000,000,000,000 lbs., with frame, price, \$1,440,000,000,000.00; Capacity 18,000,000,000 tons, weight 18,000,000,000,000 lbs., with frame, price, \$1,620,000,000,000.00; Capacity 20,000,000,000 tons, weight 20,000,000,000,000 lbs., with frame, price, \$1,800,000,000,000.00; Capacity 25,000,000,000 tons, weight 25,000,000,000,000 lbs., with frame, price, \$2,250,000,000,000.00; Capacity 30,000,000,000 tons, weight 30,000,000,000,000 lbs., with frame, price, \$2,700,000,000,000.00; Capacity 40,000,000,000 tons, weight 40,000,000,000,000 lbs., with frame, price, \$3,600,000,000,000.00; Capacity 50,000,000,000 tons, weight 50,000,000,000,000 lbs., with frame, price, \$4,500,000,000,000.00; Capacity 60,000,000,000 tons, weight 60,000,000,000,000 lbs., with frame, price, \$5,400,000,000,000.00; Capacity 70,000,000,000 tons, weight 70,000,000,000,000 lbs., with frame, price, \$6,300,000,000,000.00; Capacity 80,000,000,000 tons, weight 80,000,000,000,000 lbs., with frame, price, \$7,200,000,000,000.00; Capacity 90,000,000,000 tons, weight 90,000,000,000,000 lbs., with frame, price, \$8,100,000,000,000.00; Capacity 100,000,000,000 tons, weight 100,000,000,000,000 lbs., with frame, price, \$9,000,000,000,000.00; Capacity 120,000,000,000 tons, weight 120,000,000,000,000 lbs., with frame, price, \$10,800,000,000,000.00; Capacity 140,000,000,000 tons, weight 140,000,000,000,000 lbs., with frame, price, \$12,600,000,000,000.00; Capacity 160,000,000,000 tons, weight 160,000,000,000,000 lbs., with frame, price, \$14,400,000,000,000.00; Capacity 180,000,000,000 tons, weight 180,000,000,000,000 lbs., with frame, price, \$16,200,000,000,000.00; Capacity 200,000,000,000 tons, weight 200,000,000,000,000 lbs., with frame, price, \$18,000,000,000,000.00; Capacity 250,000,000,000 tons, weight 250,000,000,000,000 lbs., with frame, price, \$22,500,000,000,000.00; Capacity 300,000,000,000 tons, weight 300,000,000,000,000 lbs., with frame, price, \$27,000,000,000,000.00; Capacity 400,000,000,000 tons, weight 400,000,000,000,000 lbs., with frame, price, \$36,000,000,000,000.00; Capacity 500,000,000,000 tons, weight 500,000,000,000,000 lbs., with frame, price, \$45,000,000,000,000.00; Capacity 600,000,000,000 tons, weight 600,000,000,000,000 lbs., with frame, price, \$54,000,000,000,000.00; Capacity 700,000,000,000 tons, weight 700,000,000,000,000 lbs., with frame, price, \$63,000,000,000,000.00; Capacity 800,000,000,000 tons, weight 800,000,000,000,000 lbs., with frame, price, \$72,000,000,000,000.00; Capacity 900,000,000,000 tons, weight 900,000,000,000,000 lbs., with frame, price, \$81,000,000,000,000.00; Capacity 1,000,000,000,000 tons, weight 1,000,000,000,000,000 lbs., with frame, price, \$90,000,000,000,000.00; Capacity 1,200,000,000,000 tons, weight 1,200,000,000,000,000 lbs., with frame, price, \$108,000,000,000,000.00; Capacity 1,400,000,000,000 tons, weight 1,400,000,000,000,000 lbs., with frame, price, \$126,000,000,0



# The California Lloyds UNION INSURANCE COMPANY

OF CALIFORNIA.

THE CALIFORNIA LLOYDS

(Established in 1861).

FIRE AND MARINE

Paid-Up Capital, \$750,000

PRINCIPAL OFFICE,

Nos. 476 and 418 California St.

Agencies in all the Principal Cities of the  
United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.  
JAMES D. BAILEY, Secretary.  
O. P. FARNFIELD, General Agent.  
GEORGE T. BOHEN, Surveyor.

**\$72** A week made at home by the industrious  
Best business now before the public. Capital  
not wanted. We will start you. Men, women,  
boys and girls wanted everywhere to work for us. Now  
is the time. You can work in spare time, or give your  
whole time to the business. No other business will pay  
you nearly as well. No one can fail to make enormous  
pay, by engaging at once. Costly on fit and terms free.  
Money made fast, easily and honorably. Address:  
Tate & Co., Augusta, Maine.

## MUTUAL RESERVE FUND LIFE ASSOCIATION,

55 Liberty Street, New York.

INCORPORATED UNDER THE LAWS OF THE STATE OF NEW YORK.

EDWARD B. HARPER, President. T. A. AN, Secretary. CHARLES R. BISSELL, Treasurer.  
O. D. BALDWIN, President Fourth National Bank, New York, Auditor of Death Claims and Reserve Fund.  
The Fourth National Bank has a paid-up Capital of \$ 200,000; \$20,000,000 daily balance; \$30,000,000 passes  
through the President's hands each day.  
CENTRAL TRUST COMPANY, of New York—which has assets of \$12,000,000—Trustees of Reserve Fund Account.

**\$10,000 LIFE INSURANCE FOR \$50. \$5,000 FOR \$30.**

### OUR PILLARS OF STRENGTH.

First—Graded assessments, so that the young and old will pay their exact proportion, and only as the same shall be required.  
Second—A Reserve Fund, so that the permanency of the Association is guaranteed.  
Third—A careful Medical Examination, so that only the healthy can become members, thus insuring a low mortality.  
Fourth—The Tontine System, so that old members will reach a point where no further payments will be required. New members will endeavor to reach this point by being persistent in their payments.  
Fifth—By placing the Trust Fund beyond the control of the Officers and Directors, so that no part of the same can be used in paying exorbitant salaries, or expenses, or misappropriated or corruptly handled by them.  
Sixth—An open Ledger, so that the affairs of the Association may always be known to its members.  
Seventh—The limitation of the expenses of the Association to the amount received from the admission fees and annual dues.  
No association presenting these combined features has ever failed in the history of insurance. No plan of insurance ever presented to the public has such a natural hold of the hearts of the people, and has been so unanimously accepted as a sound basis for permanent protection to the insured, as that adopted and presented to the public by this Association.

**THE ASSESSMENT FOR 1882, AT AGE 35, WAS ONLY \$3.10 FOR EACH \$1,000.**

This Association is to-day composed of over fifteen thousand business men, such as Bankers, Merchants, Lawyers, Editors, Professors of our Colleges, Clergymen, Manufacturers, United States and State Senators, Chiefs of our Government Departments, and others, all united together for the protection of their families, upon a common-sense plan, each member contributing the exact amount required for the protection afforded.  
Our business in force at the beginning of the year was \$7,681,000. At the end of the year it is \$76,270,260.  
The assessments for death claim per year, for the past two years, have been, at the average of 35, but \$3 to per thousand dollars insurance, while all of our death claims have been paid in full when due; while, at the same age, the usual rates under the old system are \$3.50 per year, or \$33 for the two years, on each one thousand dollars of insurance.

### APPOINTMENT OF AUDITOR.

Mr. O. Baldwin, the highly esteemed President of the Fourth National Bank of New York City, a bank possessing assets exceeding \$20,000,000, has become our Auditor of the Death Claims, Reserve Fund and Assessment Accounts. Within the past four months he has caused two examinations to be made into our accounts. In each case his examination, as per his report, has proved eminently satisfactory.

### TRUST COMPANY AS TRUSTEE

Your Board of Directors within the year have also selected the Central Trust Company, of this city, to act as Trustee of our Reserve Fund, of which Mr. Henry F. Spaulding is President, and the Hon. J. P. Olcott, late Comptroller of the State of New York, is the Vice-President. The contract made with the Trust Company places the funds of the Reserve Fund beyond the control of the management of this Association, yet retaining a constant supervision to prevent peculation from other sources. The Central Trust Company has such capital and surplus of \$1,000,000, with assets (exceeding \$1,000,000), thus all conceivable safeguards have been thrown around the affairs of this Association.

### OPINIONS OF ACTUARIES.

Within the past year we have received written opinions from the great Actuaries of our country, Hon. Elisha Wright and Mr. Shepard Homans, as well as the opinions of many other equally reliable Actuaries. In every case the report has been that our system is correct, and our Association will be a permanent and useful institution.

### TWO SYSTEMS ANALYZED.

The fact is, there are two systems of Life Insurance in vidence to-day. The one is known as the Level Premium System; the other is known as the Assessment System.

### ASSESSMENT SYSTEM.

The Assessment System requires the members to provide for their losses as they occur. It entails the insured being the custodian of their own money until it is absolutely needed; and the only weak point, as developed by the experience of the past, is a lack of cohesiveness, which has been fully provided against under the Level Premium system of this Association.

### LEVEL PREMIUM SYSTEM.

The Level Premium System requires the members to provide for the losses before they occur. To determine the proper amount to be collected in advance, they have adopted what is known as the American Experience Mortality Table. The correctness of this table is not a matter of doubt. That it, with the interest on the excess of payments, is the only element to be considered in making up the cost of life insurance, is a disputed question, to say the least.

Our rates are based on actual and not on assumed mortality, as is the case with the old time companies, which require in advance four times the actual cost of insurance.

**FIRST-CLASS MEN WANTED IN EVERY TOWN ON THE COAST AS AGENTS.**

Call on or address

C. M. OAKLEY,

General Agent Mutual Reserve Fund Life Association for the Pacific Coast,  
314 MONTGOMERY STREET, SAN FRANCISCO.

### GOOD CROPS.

The Stanislaus Wheat Grower says. Wheat has turned out much better than the farmers anticipated. Mr. Lipp thrashed thirty-two bushels to the acre from his summer-fallow and seventeen bushels to the acre for his winter-sowing. S. K. Arney cleaned up thirty bushels to the acre on his summer-fallow and twelve bushels per acre on winter-sown—at bird more than he expected.

### FOR SALE.

### A FINE RESIDENCE

—OF 16 ROOMS, ON—

Clay St., bet Franklin and Gough.

Also one of 9 rooms on Folsom street, between Twenty-first and Twenty-second.

Twelve lots in Bay View Home-  
stead Association.Lot on Twenty-seventh avenue,  
adjoining Point Lobos road; 70x  
120 feet.One hundred and fifty thousand  
acres land in Tom Green county,  
Texas.

### 5,000 ACRES

Alfalfa, Orchard, and Vineyard Land

—IN—

### FRESNO COUNTY,

—NEAR THE COUNTY SEAT—

At \$10 Per Acre.

For particulars apply to

ROBERT PERRIN.

402 Kearny Street, - San Francisco.

### THE MEN CALIFORNIA NEEDS.

Under the above heading, we take the following very accessible article from the Los Angeles Express:  
It is but a little over fourteen years since the Central Pacific Railroad met the Union Pacific at Ogden and made an all rail route from ocean to ocean. The last spike was driven on May 8th, 1869. In March, 1881, a second route, via the Southern Pacific, was opened. In the fourteen years there have arrived in the State, by rail, 638,700 passengers. There left the State by rail, in the same time, 387,300 people, leaving nearly a net gain of population from this source of 251,400 souls. The great rushes of immigrants came in 1873-4, when we gained 26,800; and the three following years, when the net gains were respectively, 37,600, 37,500 and 24,000. Then came a large falling off until 1881-2, when we gained 20,300. The present year bids fair to become one of the largest years on record in this matter.

We need not fear this tide of new blood into the State. We number within the whole bounds of California a million inhabitants. As was shown lately, in this paper, Italy, with less area, has a population of 25,000,000 people.

But some say while we have room for many more people, we do not want certain classes. These timid souls rather say there are only a certain few classes we do want. We want only people of means. This is a mistake. It would be hard to name the class of persons who can not find a place here. The opportunities are here. All the newcomers needs is eyes to see a good thing, and resolution and industry to secure it for himself. Gold does not lie on top of the ground, nor are baked loaves found in the streets, neither are there ready built houses to be occupied rent free anywhere. But we have here gold in the mountains, bread in the soil, and material to build houses at hand.

There are men who should not come here. The man whose life is a failure everywhere would probably fail here. The chronically impenitent, the born-idiot, the blind of understanding who can not tell golden opportunities when they see them, would be likely to find California the same circumscribed field for their genius as where they now are. They would not succeed in building up a fortune over here.

But we want men, rather than money, although the money need not be a drawback to the man. A few days ago we pointed out how a man of little or no capital could come here and make an independence in a few years. We propose to follow that example with another. We will say this newcomer has \$750 to \$1,250 in ready money. There was a little ranch sold, a few days since, of ten acres with as small house and some out offices on it, for less than \$1,000. A man who can work with head, and hand on such a place can make a comfortable living. With a few animals, a large flock of poultry, ducks, geese and turkeys, and vegetables for the city markets, he can year by year lay by money. For a chicken 50 cents is a low price at any time of year. A duck is worth as much. A fat goose will sell for \$2 quicker than one of our standard silver coins. Turkeys bring alive, from 15 cents, an extremely low price, up to 25 cents per pound. Eggs sell from 20 cents to 40 cents per dozen all the year. Last spring they scarcely, at any time, went down to 25 cents.

If the settler will take our previous advice and go up on some mountain spurs, he can get land cheaper. He can dig water out of the rock, without Moses' rod to smite it. He can have tomatoes, green peas and potatoes in the market from such a cogue of vantage, where every ray of sun is caught, so early as to bring prices almost fabulous. As high as \$700 per acre have been reaped from such little patches. As the city grows in population and wealth these profits will grow more certain. There are idle hill lands in Alameda county of just such character described above, for which Portuguese gardeners pay \$20 per annum rental, and grow rich. The lands can be bought here for that sum a little way from the city.

The man who can take hold of such an enterprise, and conduct it with energy and skill, is of more use to this country than a man of five times as much money, but, who must get into a business ready made to order. What we need is the industrious, patient, shrewd pioneer, who can make a thing where it is not, or double an enterprise already started. If we must choose between brain and muscle and money, let the last be left out.

### SENSIBLE ADVICE.

The San Bernardino Times cautions the people of that section not to be foolish enough to "kill the goose that was to lay the golden egg," by asking fabulous prices for property, as the demand for it increases, wisely suggesting that "San Bernardino is not the only place in California in which good land can be procured." The caution is a wise one for every section to heed. Home-seekers have a wide field from which to select in this broad State of ours, and no community that looks well to its future interests will ask more than a fair and honest compensation that will cover all legitimate values, and enable the purchaser at the same time to realize a reasonable profit on his outlay.—Los Angeles Mirror.

### A GOOD WORD FOR THE RAILROAD.

The Calico Print, a paper published in Calico, San Bernardino county and devoted to the unalloyed interests of that section has the following sensible remarks concerning the good the railroad has accomplished for the mining community of that portion of the State:

There are many persons while vociferating against railroad monopoly and crying for a reduction in freights and fares overlook the great advantages gained by railroad communication, and also the fact that they would be as exacting, and perhaps more so, than the present monopolies, were they occupying the same position. The advantages of the railroad are plainly felt and seen in almost every branch of industry in the southern part of this State. Of course further reduction of fares and freight would be most desirable to the public, but this will all take place in time, for large corporations as well as bodies, move slowly. The railroad through mineral districts of this county has given the industry of mining a great impetus. The company has obtained water along the line of the railroad which is of great benefit to the miner and prospector, besides the time and expense saved and the great convenience gained by shipping their supplies and machinery to a much nearer point than heretofore to the scene of operations, is of vital importance to those engaged in mining. Rich mineral districts are now accessible to poor men as well as the rich, and the number of men who have and will come here with only a few dollars and have left or will leave with small fortunes is as great if not greater than can be seen reaping fortunes in any other character of business in the same length of time. While a few farmers and stage lines have suffered from the presence of the railroad hundreds and thousands of poor men now have opportunities to make handsome stakes in digging for gold and silver or engaging in business in mining towns which they would not have had without the railroad. When the iron bridge is built across the Colorado river then daily trains will be passing through here to and from the Eastern States, which will infuse new life into the principal towns along the railroad, and be a means of advertising the great mineral resources of this part of the county and causing labor and capital to become to a greater degree interested in the development of hundreds of mines that look as well externally as any rich mines found elsewhere but which are waiting for men of enterprise to take hold of them. The present and future prosperity of the numerous mining districts of this county depend to a great extent upon the inestimable benefits realized from the railroad. It is the general impression now in this part of the county that lively times will commence from this fall, and that the shipment of bullion from our mines will reach considerable proportions in a few years. There is an abundance of mineral here, but it requires enterprising labor and capital to extract it from the earth.

### A GOLD AND COPPER LEDGE.

The following we take from a late issue of the Visalia Times:

L. A. Johnson, Frank Prothero, Charlie Harland and one other men have found a ledge near Drumma valley that shows a splendid prospect. The place where they discovered it is three miles from Drumma valley and 35 miles from Visalia. There are two distinct ledges, one of gold quartz, the other of copper ore, and are only twenty or thirty feet apart. Mr. Johnson sent some of the copper ore to San Francisco and it assayed 60 per cent. Since getting the assay he has taken out much finer ore, which will probably go 75 per cent. The ore is free from any foreign substance, and can be worked very easily and economically. At the outcroppings the ledge was about two feet wide, but as the shaft goes down the prospect widens. The gold quartz is a splendid specimen, but is only from the cropping. The gentlemen have not yet had an assay made of this, but intend doing so immediately. The specimen shown the Times was a piece taken out near the surface with a pick. It is a fine piece of quartz and looks like a rock that is taken out in the richest mining districts. The gold is very fine, but can be seen very plainly on the surface with the naked eye. No estimate can be made of its value until it is assayed, but the test will undoubtedly give rich results. Mr. Johnson says that from the indications the ledge is very large, and widens out as it goes down, as does the copper vein. He thinks the two finally merge into one, and they are going to run a tunnel in below them, with the intention of tapping the two about 75 feet below the surface. Should the result prove satisfactory, the owners will extend their operations and put up a crusher and smelter. They have sent for Mark Lavelle to run the tunnel, and work will be pushed through on it as rapidly as possible. There is no doubt that there are many of these kind of ledges in the mountains above here, and should this prove as rich as it looks, the adjacent country will probably be more fully prospected than it has yet been. There have been numerous ledges found, but none where the rock would pay for the milling. If some of these were sunk down for a distance good and rich paying rock might be found.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH,

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 340 Sansome St., Colwell Building.

ISSUED MONTHLY

Terms .....\$2 per Annum.

SAN FRANCISCO.....SEPTEMBER, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

- First Page.**—The Importance and Dignity of Agriculture.
- Second Page.**—The Importance and Dignity of Agriculture, Continued.
- Third Page.**—The Importance and Dignity of Agriculture, Continued.—Santa Clara County.
- Fourth Page.**—The Importance and Dignity of Agriculture, Continued.—Santa Clara County.
- Fifth Page.**—Santa Clara County, Continued.—Interesting Facts.
- Sixth Page.**—The Georgetown Divile.—The Future Vineyard of California.
- Seventh Page.**—The Mer California Needs.—A Good Word for the Railroad.
- Eighth Page.**—The Touch-Stone of California's Prosperity.—Our New Immigrants.—California's Great Acreage.—Employment for Thousands of Men.—California Wines in England.—Two Wines.
- Ninth Page.**—California Outlined.
- Tenth Page.**—Resources and Capabilities of Lake County.—Resources of Shasta County.—A Growing City.
- Eleventh Page.**—A Traveler's Opinion.—A Desert Vineyard.—Oregon as a Producer.—Productive Land Little Known.
- Twelfth Page.**—Amador Mining Items.—The New Railroad.—A Notable Mine.—Santa Ana Valley.—Sifting Under False Colors.—A Valuable Discovery.
- Thirteenth Page.**—San Joaquin Valley.—Olive Culture.—What Work will Do.
- Fourteenth Page.**—Something About Shasta County Lands.—Good Grapes.—Profits of Grape Culture.
- Fifteenth Page.**—Yosemite Falls.—A Valuable Mine.—Six Culture.—Timber Culture.

## THE TOUCH-STONE OF CALIFORNIA'S PROSPERITY.

A third of a century ago our now thriving commonwealth was a comparatively barren territory. Her resources were undeveloped and her agricultural capacities untold. The railroad is the touch-stone that has raised this community in this short time, to the prominence of being the greatest grain producing community in the world, in proportion to its area and population. Within a quarter of a century we find uncultivated tracts clothed with waving grain, our once barren hill-sides laden with rich fruit, bearing vines and trees, our bay teeming with an active merchant marine, bearing the product of over three millions of cultivated acres to every port in the known world.

California when first settled, as a State, was known to be rich in gold, and the enormous products of her placer mines attracted attention far and wide. But in that early period of its history, it was believed to be barren of everything else. We distinctly remember it was said, at that time by many prominent men, that they would not give a bit an acre for the best lands in California for agricultural purposes, and that the gold would soon give out and the country ultimately become a dry and barren desert. How very different things have resulted since that prediction was made. The yield in the precious metals has been immense; yet it was but a small fraction of wealth when compared to that which will result from the enormous agricultural capacities of California now in process of development. Many wonderful events have occurred since the early settlement of the State which no one could have foretold. Who, for instance, could have predicted, even twenty years ago, that the time would come when steamers, and ships, would whiten every sea on the globe, bound for California, not laden with provisions to eat, nor things to use and wear as in those days, but to secure cargoes from our immense surplus of agricultural products.

The territory embraced, within the limits of California, extends along the sea-coast for over 800 miles and some 200 miles in width. The State has commercial relations with all the nations of the world. It has within its area every variety of climate and soil. It yields nearly all the known products of every clime. It has since its settlement poured into the coffers of the commercial world \$1,150,000,000 of gold dug from the earth, besides many millions worth of agricultural products. It has accom-

plished this with a very small population, which even to-day does not number 1,000,000. It has done this with men who came here possessed of no other wealth than nerve and energy, qualities which always win in the hard battles of life. We are confident that the progress which California has made in the past is but the beginning of that which is to come. Some of the most intelligent and best informed of our recent visitors, we are assured, declared, that with all their reading on the subject, they failed to comprehend California's great advantages until they came to the State and examined for themselves.

## OUR NEW IMMIGRANTS.

We are sorry to see it stated, occasionally, by a few of our exchanges, that there is nothing for the new comers to our State to do. We can not see why they should take this doleful view of the case. What facts justify them in so doing? Is there not work enough in this new and virgin land, where everything has to be created, to occupy them all? Indeed, most of them seem to know where they are going, and what they will find to do. They are not wanting in such large numbers that there need be any apprehensions felt as to how they can be taken care of. The American people are much in the habit of taking care of themselves, and so far they have proved equal to the occasion.

Of course, this immigration should be aided with reliable information upon all questions touching their wants. It will be well for the State, and well for the immigrant, if there is a general disposition manifested to give them encouragement, and help them with advice and an opportunity to tide over the first year of their residence among us. It would be well for the great land owner, and well for the immigrant if this is made the occasion of dividing the large estates and throwing them upon the market in small farms, and upon favorable terms. But it is, after all, nothing to come here now, where there are rich lands, a known climate, law, churches, schools, religion—all the attributes of a grand civilization—and abundant food in our own fields for each, though they were many times as numerous. When the early immigrants came there was neither food, nor clothing, nor law, nor civilization in the land. They brought all these with them and planted them here. Yet neither the people or the press mourned their coming. Each took care of himself, and an empire grew. And why can not the immigrants now arriving do the same? Are they less brave, less hardy, less persevering, less economical? Their opportunities are superior to those who preceded them more than a third of a century ago. Give them a chance to show what stuff they are made of before declaring that they can not find anything to do.

Who can describe the immense change that has taken place since the advent of the early settlers of California. The soil, which had never been broken by the plow, has been made to yield the most bounteous crops of all kinds, and in such abundance that from importer she has become an exporter. Her fertile valleys are no longer over-run by herds of wild cattle, but have been converted into grain fields, orchards, vineyards and gardens, yielding every variety of choice fruits, vegetables and flowers. She has entered into a lively competition with the vineyards of France, Italy and Spain in the production of grapes. Cities and towns have sprung up, as it were, by magic. Each of them is fast becoming a distributing point of supplies for the numerous settlements which are constantly being added by the never-ceasing immigration.

## HON. IRVING M. SCOTT'S ADDRESS.

We devote considerable space to the address of this gentleman, at the State Fair on the 13th inst. It is able and instructive, and will well repay a careful reading on the part of all our patrons. He demonstrates most conclusively, that all intelligent labor is both useful and dignified. The address shows study and research, and yet it is so simplified that a pupil of the fifth grade of our public schools can understand its language. Among the distinguished gentlemen of California, who were present, we will name the following: Gov. Geo. Stoneman, Ex. Governor Wm. Irwin, Gen. John Bidwell, Hon. Jas. McMillan, Mayor Brown of Sacramento, John H. Wise, Col. Chas. F. Crocker, Hon. John W. Biggs, Jesse D. Carr, and H. M. La Rue.

## CALIFORNIA'S CEREAL ACREAGE.

Secretary Edwin F. Smith, of the State Board of Agriculture, has compiled and published a statistical table showing the area, according to the data obtained by him, of the wheat, barley, corn, oats and rye in each of the counties of the State this year. His total of wheat is 2,631,710 acres; barley, 775,405; corn, 65,756; oats, 132,618; rye, 29,351. This is the actual acreage sown to grain, but it does not include summer-fallow which will produce a crop next year. From the reports he has received the secretary is of the opinion that the wheat crop will fall twenty per cent. below that of last year, while the acreage is ten per cent. greater. He reports an increase of fifteen per cent. in the barley acreage of this year over that of last, and the probability of an average yield. The acreage and condition of other cereal crops are about the same as last year.

Speaking of our large crops of wheat the American Miller remarks that few people, even in our own country, realize how inexhaustible its resources are for wheat-growing. The total area of lands available is not less than 500,000,000 acres. California's entire wheat crop, of this year, would not supply seed enough to sow so vast an area of land. We claim that California is justly entitled to a large share of the credit for this good showing. There is no doubt but our young commonwealth has shown a capacity for wheat-raising that has astonished the world. She raises about one-eighth of all the wheat produced in the United States. This year, after feeding our own population of nearly a million, we shall export over a million tons to feed the people of the old world. Notwithstanding there is less than 3,000,000 acres devoted to this cereal in California, she has already taken the lead among the wheat-producing States. We now grow wheat enough to load seven or eight hundred ships, in addition to what is required for home consumption. For this our people are, undoubtedly, thankful; but we trust that they will not be satisfied with past achievements. On the contrary, they should only serve as incentives in the future. It has been estimated that there are, including the swamp and overflowed lands, fully 20,000,000 acres yet to be added to the area of wheat land now under cultivation. We may safely estimate that the grain acreage will, from year to year, increase until this whole tract is under the plow. When that time arrives, and it surely will within a few years, our State alone will be able to supply not only all her own people with bread-stuffs, which will probably number 5,000,000 at least, but she will have a large surplus for export to Europe. Our soil and climate are admirably adapted to the cultivation of this cereal. There is plenty of evidence going to show that no other country can excel our State in the growth and quality of her cereals. It is an acknowledged fact that California wheat ranks highest in the foreign markets. Neither rust, smut nor any other disease, common to much of the wheat produced in the Atlantic States and foreign countries, injure it.

## OUR NATURAL WEALTH.

The world at large is beginning to have a proper appreciation of the natural wealth of California. People who regard it merely as a gold and silver producing State are not aware of the fact that her agricultural and other products are of more value than all the resources of her mines as vast and valuable as they are. Her grain and her fruits far exceed the value of her richest mines. The grape crop of this year is so abundant that preparations are being made to convert thousands of tons of them into raisins. In the article of annual fruits California will soon beat the world, and furnish the markets of the country with an abundance of the finest varieties at the lowest prices. Aside from some lucky speculators, the well to do men to-day of California are not those who looked for gold in the mines, but that class who sought a competency by other methods.

## GRAPES.

The Santa Rosa Republican says, that a bunch of grapes from the ranch of E. H. Morse, near Santa Rosa, on exhibition at the Farmers' Exchange bank, weighs four pounds. The grapes are of the Chasselas variety and are very handsome.

Subscribe for THE RESOURCES OF CALIFORNIA.

## EMPLOYMENT FOR THOUSANDS OF MEN.

The immense areas of rich and fertile lands adapted to fruit-raising and agriculture, as yet unoccupied, must impress intelligent people with the boundless opportunities this State still offers for making homes and securing comfort in a very few years. We have said, and our opinion is shared by professional orchardists, that there is a chance in California for a million men to make comfortable homes by engaging in the business of growing fruits, oranges, lemons, grapes and olives. In any one of these pursuits a farmer may realize a regular annual income varying from one hundred and fifty to three hundred dollars an acre, according to the skill with which his work is done and the quality of the fruit he cultivates. In parts of San Bernardino five acres in raising grapes may be relied on for a clear profit of \$1,200 to \$1,500. In Sacramento, Yolo and Alameda counties berries and upstarts often yield still more to the acre than raising grapes in San Bernardino; and the walnut, almond and orange orchards of Los Angeles and Santa Barbara do better still.

The foot-hills of the western slope of the Sierra Nevada range of mountains, embracing an area of forty miles wide and four hundred long, are peculiarly adapted to the cultivation of fruits, vines, nut-bearing trees, agriculture and stock-raising; and the hills and valleys of the Coast Range of mountains, comprising a tract of country 500 miles long, are equally adapted to the same pursuits. And yet in all this region not one acre in a hundred has been brought under cultivation.

## CALIFORNIA WINES IN ENGLAND.

Speaking of the prospects of the wine interests generally and alluding to the damages done by the phylloxera, the *St. James Gazette*, a publication of acknowledged standing in England, says: "Now that the phylloxera has damaged almost beyond repair a large proportion of the vineyards in France, and the wine exporters have been obliged to supplement the natural juice of the grape with some less pleasant decoctions, it might be well for some enterprising firm of wine merchants in England to turn their attention to the wines of California. There is one peculiarity about the cultivation of the vine in California, which the vineyard owner of France and the hop-grower of England will learn with envy. For the last 30 years there has not been a single season in which the crop has not been a complete success." The outlook for the wine-growers of California is encouraging. Great damage has been done to our wine by unscrupulous wine vendors, and also by the use of foreign nomenclature and labels. In spite of this our wines are growing in favor, and the time is not far distant when they will be found, under their own proper name and label, on the tables of our best hotels and on the side-boards of our acknowledged wine connoisseurs. California is surely destined to be the vineyard of the world.—*San Bernardino Index*.

## PURE WINES.

A writer in the *Chronicle*, of this city, has the following:

Our native wines, thanks to the intelligent influence of the State Viticultural Society, are kept pure. Our brandies, though a small amount of coloring matter is used by some makers to give the hue which most persons consider a test of their quality, have not been to any appreciable extent adulterated. Some of our most reputable makers use no coloring matter whatever, and their brandies are not only excellent in flavor, but above suspicion. It would perhaps be better, under the circumstances, that all adopt the rule and allow their brandies to go to market with only the pale tint from the casks. This would be an additional guarantee of their excellence, and could the consumers, whose tastes have been vitiated by the adulterated foreign article, be induced to understand them, a victory of incalculable importance would be gained. It is possible that brandies may be adulterated in California, but we do not believe that it will be attempted by any distillers of repute, no matter with what ease it can be accomplished or how much cheaper the product. The purity of our wines has thus far been maintained by the honesty and associated vigilance of our grape growers, and we believe our brandies can be left to the same considerations and thorough supervision.



## CALIFORNIA OUTLINED.

A Plain Statement of many of the Inducements she Presents in Every Branch, Thoughtful, Active, Pioneering and Industrious Men, who Seek Through the Medium of Honest, Well-directed Labor, to Rise to the Dignity of Unqualified Independence.

(Written for THE RESOURCES OF CALIFORNIA, by James O. Rump.)

California is no place for a good-for-nothing, shiffling, lazy man, who seeks to get a living or obtain a competence in any other manner, than through honest, well-applied labor and effort. Neither is she adapted to the necessities of one who has a family to support, no capital, and only his two willing hands to assist him. It is about as poor a locality as I know of, for a preacher, lawyer, doctor, clerk or professional man, unless possessed of the most signal ability—in other words, of qualifications far above the average of those even, who, not only are considered, but are in reality, decidedly talented in their particular sphere. If, however, on the other hand, there is a more desirable or better section extant, (all things considered) for the home of a sensible, enterprising, earnest—never say die—industrious man, who has means ranging from a thousand dollars upwards, I would sincerely and respectfully ask the possessor of such knowledge to kindly inform me where that locality is?

I came to this State thirty-four years ago, and thoroughly acquainted with its topography, climate, advantages and every resource, and unhesitatingly and conscientiously state, that in my opinion, it is the healthiest, fairest, best in every respect, and most favored land upon which the dew of heaven falls, or blazing sun sheds its effulgent, penetrating, life-giving rays. I have reached this conclusion through the medium of actual, practical experience, and the closest research, and know fully as well as I do that I am a living being, that my deductions are unquestionably correct.

We can judge of the merits of anything material, only by comparison, and as California has been honored by the advent of a very large number of distinguished visitors from every portion of our Common Country, most of whom have made the journey hither for the first time, I propose in this communication, to address myself particularly to them, and ask all such who shall chance to read my statements, to afterwards institute comparison between what they may have seen and experienced here, and that which they have at home, and in fact have been accustomed to, from childhood up. Knowing as I do that their conclusions will be the same as my own, and that they are filled with admiration of the mighty resources lying around in every direction, inviting enterprise, plainly indicating and pointing with the hand of manifest destiny, to a state of civilization, far grander, prouder, and more advanced than was even yet attained or even so much as dreamed of, by any people of whom history or tradition gives account.

Nothing comparatively has been done here in the way of manufacturing, and yet the conditions are very superior in many respects to those found in any other portion of the country. We have the largest and most available water power of any State in the Union, extending completely over that portion of California known as the Great Foot-hill region, which among other advantages never freezes. Our climate is such that very many portions of the work upon different articles can be performed out of doors the year round, and this is a desideratum of the utmost importance, it being in fact one of the principal causes, that has given the blankets manufactured in this city, at the Mission Woolen Mills, a quality and reputation far above those made in any other quarter of the world. Nearly every description of iron goods could be made here, from a locomotive or steamship down to a cooking stove, and of all places in America in which to manufacture the latter, this is certainly the most advantageous. Iron of the very best quality abounds throughout the mining region, that of Clippert Gap, Placer Co., being fully equal to the best Scotch imported, and right in that immediate vicinity, extensive works should be erected, the water power being enormous and close at hand. We export most of our wheat instead of first making it into flour, and send word to other localities to be woven into cloth and returned to us again, when, (as I said before) this is the very best section known (naturally) for the manufacture of woolen goods. The little fish

called the sardine, swarms in countless millions all along our coast, from Lower California to Oregon, and there is literally no limit to the supply of olive oil we could produce, and yet no one has ever put up a box of them, while on the other hand, we have imported millions of dollars worth from France, and still keep on doing so as the years roll by. All our wooden ware, a large portion of the necessary supply of furniture, as well as our own, farming implements, etc., are imported, while hundreds of our hogs, pork, ham and bacon come to us over the railroad yearly, notwithstanding this is one of the very best places on earth in which to raise hogs. In the winter season, too, turkeys, chickens and other poultry come to us regularly from Kansas, Nebraska, Iowa and other States west of the Rockies and Missouri river. This is all wrong, it should not be so, and here is a grand opening for those who wish to establish themselves in a good business, that will pay well and finally make them rich.

Our wines are becoming well-known and highly appreciated, and here is one of the most splendid opportunities for enterprise that has ever existed in any age of the world. Hundreds of thousands of vineyards can be set out, and still there is no such thing as overdoing the business. Even now, we sell the wine so fast that it cannot be kept long enough to attain the necessary age required to suit the market. The time is coming when California wines and brandies will stand at the head of all others, when this will be the great headquarters of these products, from which they will be shipped to every portion of the civilized world. There is a chance here for half a million men to engage in this business, large areas of land in the State being adapted to grape culture.

I come now to the great overshadowing business of all, that is destined to convert the whole State into a countless number of delightful vineyards and orchards. California will soon become the chosen land of the viticulturist. Nature designed this piece of territory, 800 miles one way, by 250 the other, to finally be the great fruit producing region of the world. Upon one side of it she created the majestic Sierra, towering heavenward to an altitude of 13,000 feet, placing upon its crest the eternal body of snow, that throughout the generations to come will furnish the element, with which to irrigate the whole foothill section, Sacramento and San Joaquin valleys.

In California, water makes everything possible, given a sufficiency of it, and the soil will produce a crop, such as mortal eye never gazed upon before. The snow that accumulates during a rainy season, as I stated in a former communication, melts during the warm months of spring, summer and fall, and passes off into the Pacific Ocean. This, if saved and utilized, would water the whole State, and the time is soon coming when it will be made to do so. The project is a grand one, that may well interest the capitalist. Railroad investments have had their day, and the next great operation, involving thousands of millions of dollars will be the erection of mighty aqueducts hundreds of miles in length and composing in their aggregate, a "magnificent, inland mountain sea," that will be carried through a vast outwork of flumes and pipes all over the three sections named. When this great enterprise shall have become an accomplished fact, California will enter upon a career of activity and productive grandeur, such as the most enthusiastic visionary dreamer never for a moment contemplated, and which will make her the great center of civilization in the twentieth century and San Francisco the distributing depot of the world. This will as surely come to pass, as night will follow day. We read of dreadful cyclones, of houses blown to atoms, whole families destroyed without a moment's warning; of thunder and lightning and men, women and children struck dead by thunderbolts; of hail stones large as duck eggs, that kill the cattle in the fields, while here in this favored, heaven-blessed State of California, all is tranquil and serene; those of our citizens who were born here not knowing what such statements mean. Is any person so mean as to suppose that people will not flock to such a favored locality? Do not ships seek the safest harbor, and in fact does not humanity always select the best it can find, and will people, who can have their choice, be fools enough to drink skinned milk, when they can get pure, unadulterated cream, and that too at a far less price? The fool is the world has not got its eyes open yet, and has not found out what a glorious

place California is, but it very soon will, and the extremely good thing we '9ers have enjoyed, or rather monopolized for the past thirty-four years will soon have to be cut up, and passed around among our less fortunate brethren.

The cultivation of the raisin grape, drying and putting up box raisins is another pursuit that has paid extremely well thus far, and which bids fair to become of the very largest and most important of our industries. Fresno county is particularly adapted to the culture of this fruit, the extremely long summer and dry, hot weather in September and October being the great culminating advantage, enabling the producer to dry his grapes and carry on every detail of the process in the open air. The vicinity of Riverdale, and Santa Ana valley, too, is equally well favored, the product being fully as good as that imported from Malaga, and finding a ready sale at very remunerative figures.

Raising and drying prunes is still another specialty that will pay well, and can not be overdone; and what, I would ask, could any one desire better than an orchard of 10 acres of this fruit, with twenty more for all other purposes? A man thus situated would be one of the most truly independent persons upon the face of the earth. It is literally impossible to conceive of any business that would be at once so agreeable and, at the same time, free from the thousand and one difficulties and petty annoyances that beset us at every turn of the road, and which seem to be inseparable from nearly every pursuit in the catalogue, scouring the disposition and making our lives an absolute burden to be endured instead of enjoyed.

I might go on and enumerate several other fruits which any one can cultivate solely for a business, but will only mention the apricot, which belongs almost entirely to California, it growing here to perfection. Twenty acres of this fruit would support a large sized family in affluence, and the trees will flourish in nearly every portion of the State.

We neither have extremely hot nor intensely cold weather, and in the city of San Francisco experience that great boon so often prayed for by the denizens of the East, namely, a region where it is cool in summer and warm in winter. This, I repeat, is a literal realization in this city, and all those desiring such a climatic condition need seek no further, but come here at once and enjoy themselves as best they may, and to their heart's content. If asked to enumerate some of the advantages of California over all other portions of the world, my reply would be—my style of climate desired. Three hundred and fifty days of each year warm enough for a man to work out of doors in his shirt sleeves, in nearly every portion of the State, and particularly in that part lying between Point Conception and the 32d parallel of latitude. This region constitutes the "sanitarium of the world," and where the poor consumptive can go, recover and live, if the awful disease has left just enough of him or her for nature to build upon. The foothills of Santa Barbara, Los Angeles, San Bernardino and San Diego counties being, at an altitude of 1,200 feet, the most invigorating, health-promoting, life-giving region upon the whole American Continent. This is a great and very important fact that the people everywhere should know and fully realize. Not only can a person go there with almost absolute certainty of recovery, unless too far gone, but with the surety of being able to get a living, remain, and even become wealthy through viticulture, bee-raising and kindred pursuits.

The finest field in America for men of small or large means to establish themselves in the wine-making and fruit-raising business, either on a small, extensive or gigantic scale; in the former case, not being under the necessity of expending all their capital in the erection of a house and out buildings, the climate being such that the latter are not needed, while the former can be built by any one of ordinary mechanical ability, for say, three to four hundred dollars, and that, too, good enough for a family of six to live in for years or until the vineyard and orchard come into full bearing, and yield the money to build a better one.

The best section in America in which to raise wheat, this being the banner State for 1883, in all probability; while for stock-raising she stands pre-eminently at the head, with the certainty of becoming, in the near future, the

birthplace of the finest types of animal life to be found upon this planet. Her magnificent horses will soon be known for and wide, while, even now, her splendid sheep are being exported to countries that have heretofore been celebrated for their fine breeds of Cotswolds, Southdowns, Spanish and French Merinos.

Six months of continuous, unbroken sunshine, with no fear, care or thought of a rainy day. School facilities of the very highest order; churches the same; and a press that—for editorial ability, news reliability and enterprise in securing, at whatever cost, the latest telegraphic information from all parts of the world—is second to none in the nation. Places of amusement equal to the very best found anywhere, and hotels that are, at once, the admiration and wonder of visitors from every portion of the earth.

These are a few of the inducements the Golden State has to offer, and I respectfully submit the truth of every statement I have made, even to the minutest particular. California is the most desirable spot in all this world for a home. This is an incontrovertible fact that needs no demonstration whatever, for here the people are exempt from every great physical trouble, and most of the lesser ones that afflict humanity everywhere else. Let the reader, who has the slightest doubt of this, simply sit down before a map of the world and see if he or she can place a finger upon any other section possessing such manifestly transcendent advantages.

SAN FRANCISCO, September, 1883.

## RAILROAD LANDS.

It is gratifying to note the fact that the railroad companies are selling their lands in comparatively small tracts. They have had many offers for large tracts from syndicates and speculators but they have preferred selling to those who will occupy and improve the lands.

## A BUSY TIME.

The wood choppers in the vicinity of Truckee will be unusually busy the next four weeks. Contractors have agreed to deliver large amounts and the flames and men will be kept hard at work.

## THE ACCIDENT INSURANCE COMPANY

OF NORTH AMERICA.

ORGANIZED, A. D. 1872.

President, SIR A. T. GALT, G. C. M. C.  
Vice-President, HON. JAMES FERRIER,  
Managing Director, EDW. RAWLINGS.

HEAD OFFICE, MONTREAL, P. Q.

## IMPORTANT

—TO—

## Commercial Travelers AND MERCHANTS.

The new form of Policy issued by this Company tends to provide for TRAVEL TO AND RESIDENCE IN EUROPE AND MEXICO WITHOUT EXTRA CHARGE.

The following conditions, SO OBJECTIONABLE TO COMMERCIAL TRAVELERS, and heretofore found in all Accident Policies, is not contained in this Policy, viz: "Shoulding, riding or being upon the platform of moving railway cars, other than street cars, or riding in any place not provided for the transportation of passengers, or being on the bridge of any railway, or being on any bridge or covered by this contract. And on such will be paid for loss of life or disability (in consequence of such exposures) depending to any person other than employees, who shall have given notice of such occupation, and paid the fixed premium for such hazards."

IN EVERY RESPECT THIS POLICY IS THE BEST EVER ISSUED.

Call at our Office and Examine before you take or renew a Policy elsewhere.

The record of this Company is also unimpaired. Not a single accident at loss since its organization in 1872.

H. D. IRWIN & CO.,

General Agents for the Pacific Coast,

405 CALIFORNIA ST.,

SAN FRANCISCO, CAL.

JOHN T. TOY, City Agent.



# RESOURCES AND CAPABILITIES OF LAKE COUNTY.

The editor of the St. Helena Times has been recently on a tour of observation through Lake County; from his paper we copy the following regarding one of the rapidly growing sections of the State:

The question that most interests the people of Lake County at the present time is that pertaining to the growth of the vine and the adaptation of their soil to its culture. There are already over one thousand acres planted in vines, a portion of which ranges in age from one to two years. Quite an impetus has been given to the business within the past twelve months through the course of many enterprising gentlemen who have staked out of considerable capital started new vineyards and feel greatly encouraged at the outlook. Many of these parties have been induced to take this step from witnessing the astonishing progress that has been made in viticulture in the Napa Valley during the past five years. They believe that the soil in many portions of Lake County is well adapted to the successful culture of the vine and their faith is undoubtedly well founded. There may be here and there spots which are liable to be visited by late frosts but experience shows that while there may be some risk consequent upon this possibility a large portion of the county will be found well adapted to the purpose, and others as well as those now interested in that industry will engage in the work with fair prospects of liberal remuneration. One of the most promising looking vineyards in the county is that started within the immediate vicinity of Lower Lake, owned by a company of gentlemen belonging to San Francisco who deputed R. K. Nichols, Esq., to represent their interests and push the business forward. Mr. Nichols encountered a very tough country when he took hold there, but nothing daunted he went to work in earnest and leveled hundreds of acres, rooting out the unpromising chemical that beset his pathway on every side and planting the productive vine in lieu of the same. His vineyard of 300 acres is now the subject of wonder and admiration at the hands of all who knew what the country was but a short time ago. The Zinfandels and Chasselas varieties predominate in this vineyard, and their present appearance shows what can be accomplished by untiring industry and perseverance. Maurice Keatinge, Judge Hastings, J. L. Smythe and many other pioneers in a like enterprise are also demonstrating the possibilities of Lake County in the same direction, and the examples of these gentlemen seem to be having a most salutary effect. The industry is, in consequence, receiving earnest and merited attention, and wherever we made inquiries on the subject we found that Napa Valley cuttings had been conspicuously sought after by those engaged in the business. There will be several wine cellars erected in various sections of the county during the coming twelve months, and the people generally are looking forward to an era of prosperity in connection with this promising industry, and the introduction of live men and additional capital that it foreshadows. In addition to the outlook from this standpoint splendid grain crops are reported in Lake this season, and matters generally wear quite a promising aspect with every indication of peace and plenty in the near future. Whether the railroad is built or not, (but it is certain to be built at no distant day) the impetus already given to business by what has been done, coupled with the recent rapid rise in the value of real estate and other promising signs for the future reveal quite a hopeful condition of affairs for Lake County, and her neighbors one and all will be gratified to witness the change for the better.

## LUMBERING.

The saw mills west of the summit of the Sierra Nevada mountains, in the belt tributary to the Central Pacific, says the Grass Valley Union, will cut about 25,000,000 feet during the season. Voss will cut 2,500,000 on the Yon Bet divide; Carlin will cut about 1,000,000 at Gold Run; Towle Brothers 12,000,000 in their mills, with the Dams-gard mill idle. They now have eighteen miles of railroad and three engines. They have just moved the Kearsegar mill and got it running. Geisendorfer will cut 1,000,000 in Onion valley, back of Emigrant Gap; Friend & Terry will cut 3,000,000 on north fork of the American; Avery will cut 1,500,000 in Monument canyon; Marsh will cut 2,000,000 on Rock creek, above Nevada City, and Cooper 1,000,000 on Deer creek.

## NO WONDER.

Twenty-five pounds of quartz sent down from Tom Green's mine on Deadwood is pronounced the richest lot of quartz of that size that has ever been shown in town. Deadwood is becoming famous for her gold quartz deposits. In fact the mountain region between French Gulch and Deadwood is "lousier" with gold. No wonder W. T. Coleman and other capitalists are investing in those golden hills, interlaced and bound together, as it were, with cords and net-work of gold and quartz.—*Shasta Courier.*

## RESOURCES OF SHASTA COUNTY.

A correspondent of the Sacramento Bee has written to this journal, from Redding, a very interesting letter concerning the resources and prospects of Shasta county. From it we take the following:

For many years after the discovery of gold in the northern part of the State, Shasta county was one of the wealthiest, most prosperous and populous counties in California, and Shasta city was the emporium of the north. As the mines proved less remunerative, many ranches were taken up along the foothills and valleys. Much of this land proved very productive and well adapted for grain and fruits. Several important quartz mines have been discovered and partly developed, and by aid of capital to properly develop them would doubtless prove to be valuable property.

During the last three years the tide of immigration, which had been pouring into the southern part of the State and making the deserts blossom and bear fruit, has been turned in this direction, and much excellent land is being bought and improved. Our local Immigration Society has been the means of attracting many persons to this county who were in search of homes. Thousands of acres of land, which had been considered worthless except for grazing purposes, have been found by experience to produce fine crops of hay and grain and well adapted for vines and fruits. As this county is situated at the head of the Sacramento valley, and embraces such an extensive area of foothills and small valleys, and is so well protected by mountain ranges, these advantages, together with the fact that water is abundant, the soil fertile and the climate salubrious, are destined to make this one of the finest fruit counties in the State. The lumbering interests are but partially developed. Fine forests of sugar and yellow pine, fir and cedar only await the investment of capital to bring them to market. The extension of the California and Oregon Railroad will open up a large section of country which contains great possibilities.

The pleasure resorts are attracting considerable attention. The grand natural scenery, the abundance of fish and game, and the cool, sparkling, health-resorting waters of our springs and mountain streams, are great inducements to tourists, and will be patronized by thousands of health and pleasure-seekers when their advantages become generally known.

Notwithstanding that hundreds of acres of lands have been taken up within the past few years, thousands of acres of grain, fruit, grazing and timber lands are still vacant, and only await capital and enterprise. What is most desired is that the fact be generally known that this county possesses unlimited resources.

## W. M. BRANDON & CO.

344 Kearny Street, Telephone No. 221, 3 bells. Branch, 2008 Fillmore Street, Telephone No. 4,077. SAN FRANCISCO.

**REAL ESTATE AND FARMING LANDS BOUGHT,** sold and exchanged on commission and private account. Merced, Fresno and Tulare irrigated lands with water rights a specialty. Houses rented and rents collected. Money loaned.

**\$3,000.** 127 ACRES ROLLING AND HILL land, near Napa Soda Springs; 10 acres in vines, 15 acres more ready to plant; one acre gooseberries, balance titillable; house and barn; also very fine spring of water. W. M. BRANDON & CO., 344 Kearny street.

**\$2,500.** 74 ACRES IN SONOMA COUNTY, 2 miles from depot and postoffice and half a mile from school; 34 acres is perfectly level, balance gently rolling; good soil, particularly adapted for fruit; 2 acres grapes; vineyard and orchard; and fine climate; 400 cords of wood cut and ready for burning; plenty of standing timber, which will more than pay for the place; common house five rooms; barn and out-houses; 2 cows; 4 good work horses, with their harness; 1 four-horse wagon; 1 two-horse wagon; 1 spring wagon; plow; cultivator; harrow. W. M. BRANDON & CO., 344 Kearny street.

**20 ACRES AND UPWARDS—1600 ACRES FINEST** fruit, grape or farming lands in the State; all rich level land, and plowed ready for planting; we sell on small yearly installments; cheap land and convenient for transportation; best opportunity ever offered for a poor man to obtain a home; will suit all classes; plenty of rain and lovely climate. W. M. BRANDON & CO., 344 Kearny street.

**\$30,000.** 1,000 ACRES ON SONOMA creek, three miles from the town of Sonoma; 200 acres under cultivation, as follows: 26 acres in full bearing grape vines, all healthy and vigorous; 16,000 young grape vines, one and two years old; 18 to 20 acres in full bearing orchard, consisting of apples, peaches, pears, plums, apricots, etc.; 25 acres in grain; 400 acres more of the land can be cleared for grapes and fruit. On the balance of the land there is good pasture and between 7,000 and 10,000 cords of wood. Place well watered by running streams. Terms easy. W. M. BRANDON & CO., 344 Kearny street.

**\$12,000.** 165 ACRES FINE FRUIT LAND in the Vacaville warm fruit belt all fenced 115 acres under cultivation, balance pasture and timber; good orchard, 3500 trees, choice fruits, 21 acres vineyard, and varieties of table grapes, present crop worth \$1000, one-half of which is included in the price, payable in cash at commission merchants, in San Francisco, all necessary farming tools, 8 tons hay, 400 feet box, one 3000 fruit wagon, house, barn, fruit packing house, out house and sheds, two good wells and several springs of fine water.

**\$20,000.** 320 ACRES LEVEL LAND IN Contra Costa county, all fenced and highly cultivated; two dwelling houses; one hard finished, 6 rooms; water in houses; stockyard and garden; two wells, tanks and windmills; 1,000 vines, foreign varieties; good orchard.

W. M. BRANDON & CO.,  
344 Kearny Street.

## THE LEADING

# GROCERY HOUSE!

## VISITORS

WILL FIND AT OUR HOUSE THE best assortment of delicacies from all parts of the commercial world.

TO RESIDENTS OF THE PACIFIC COAST AND GROCERS,

We Offer Superior Inducements,

—AS ALL OUR—

Fancy and Staple Groceries

ARE IMPORTED BY US DIRECT.

TO FARMERS AND FAMILIES.

Our Prices are Unequaled and Quality of Goods Unsurpassed.

We would Call especial attention to our

LUNCH GOODS, OVERLAND BASKETS

—AND—

CALIFORNIA WINES

Of the Purest Quality. Put up in packages suitable for handy transportation.

PRESERVED DELICACIES FROM ALL FOREIGN COUNTRIES.

Lebenbaum, Goldberg & Bowen,  
428-432 PINE STREET.

Lebenbaum, Goldberg & Co.,  
447-449 POLK STREET, S. F.

PRESCOTT & CO.,

PROPRIETORS OF

Queen City Market,  
DEALERS IN ALL KINDS OF

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Choicest Eastern Ham, Bacon, Lard and Foreign Sausages of all Kinds.

CORNED BEEF AND PORK FOR SALE BY THE BARREL.

1154-1158 Market St., and 6-8 Taylor St.

Established by Daniel Norcross in 1849.

NORCROSS & CO.,

MANUFACTURERS AND IMPORTERS OF

REGALIA, PARAPHERNALIA, ETC.

MILITARY GOODS, FLAGS AND BANNERS.



KNIGHTS TEMPLAR COSTUMES A SPECIALTY.

NO. 6 POST STREET.

Masonic Temple,

San Francisco.

KENIG'S,  
122 Kearny Street 122

—IS THE—

ONLY PLACE IN THE CITY

—WHERE NONE BUT—

GENUINE

French Boots and Shoes

ARE SOLD.

Ladies and gents who wish the real imported French goods can not be too careful in buying from dealers who keep but a few dozen pairs of the real article in stock, and consequently will sell you a useful or Chinese-made shoe, with a French name in them.

For the largest and best assortment, the lowest prices, the best and most comfortable fit and a superior quality of

KID GLOVES,

—OO TO—

KENIG'S,

122 Kearny Street, Thurlow Block.

COMMERCIAL

INSURANCE COMPANY

OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, June 30, 1883, \$390,524.06

Losses Paid Since Company was Organized, \$906,379.13.

JOHN B. WISE, President  
CHAS. A. LATON, Secretary

OFFICE.

No. 405 California Street, S. F.



The Amador Ledger, in speaking of the wheat in the foothill section, says: "It turns out better than in the valleys this season. R. Plasse gathered from 40 acres about 30 tons of the finest kind of wheat, the kernels being large and plump."



## AMADOR MINING ITEMS.

The *Dispatch* in speaking of some of the mines in the Plymouth district, says:

There is every reason to believe from the reports that the Pacific and Empire mines are yielding more bullion than ever before, and that the facilities possessed by these mines for working the numerous quartz are better and that the water supply is so abundant that the mills can be kept running at full blast nearly the whole year round, and all the work of extracting the gold from the rock both in the mill and also in chlorinating the sulphurets will be done on the claims. The parties owning this immense property seem inclined to make everything work to the very best advantage.

Mr. W. T. Henson has just returned from his mine, and reports everything about the mine looking first rate, and that a new shaft is being sunk. This well known quartz lead is destined at no distant day to surprise the natives, and Henson is just the man to give it a start, as he is better acquainted with the range than any one that we know of.

There is a new mine being opened just west of town in what is known as Long John Gulch. This mine is on the south extension of the Vatican mine, and is owned by the Grader brothers, and is called the Grader mine. The proprietors say that the rock is very rich. The only trouble that they have in sinking is the water, which necessitates the running of a pump night and day. We hear that the owners have ordered suitable machinery to put on for the purpose of hoisting and pumping out the water. They also intend putting up a small mill at no distant day.

## THE NEW RAILROAD.

Under this heading the *Lakeport Bee* has the following:

There is no doubt now as to the intention of the Central Pacific Railroad Co., in relation to the building of a railroad through to Lake county. The company's surveyors, as heretofore stated, have been at work a long time past, commencing at Vacaville, and had worked through to the vicinity of Middletown, a few days ago. The road will be completed from Vacaville to the Berryessa valley the coming summer, and Berryessa west will be shipped over the new line next fall. Just when the road will be completed to Clear Lake is, however, not so very plain, as there is a difference of opinion on that point, some declaring that the company have no desire to complete the road to the lake until the county is more thickly settled, and there is more business; that the road will be built to Berryessa, the line surveyed clear through, and then matters will rest—the work thus completed standing as a menace to any other company that might desire to construct a road to the lake. On the other hand, there are others who believe that the Central Pacific Co. intend to complete the road to the lake within eighteen months. It is very certain that the Berryessa people will have the road the coming summer, as above stated, and hereafter that portion of Napa county will improve more rapidly than heretofore.

## A NOTABLE MINE.

In speaking of the Mammoth mine, in Amador county, the *Ledger* says:

Senator J. P. Jones and others, have secured an interest in this prominent mine. A working capital of \$100,000 is to be put in the treasury, for a systematic development of the claim. A tunnel is to be run from near the Mokelumne river. This will strike the ledge on the Mammoth ground at a distance of about 800 feet from its mouth. It will then have to run over 1000 feet more to reach underneath the present shaft. It will tap the ledge at a depth of nearly 1000 feet. The tunnel is to be of a most substantial character, supplied with a double track. Operations were started on this undertaking last week, and it will be pushed ahead with all possible speed. As soon as the ledge is struck, the intention is to put up a 40-stamp mill. The tunnel will take at least six months to complete, making an average of ten feet per day. Air compressor drills will be used, operated by water power by means of one of Knight's wheels; the same water that runs the mill, can also be used to run the drills. It is estimated that the construction of the tunnel will cost from \$25,000 to 30,000.

## A PLACER COUNTY DRIFT CLAIM.

In speaking of the Turkey Hill drift claim near Michigan Bluff, the *Placer Argus* says: It is one of the great mining properties of the State. The main tunnel runs into the hill 6300 feet, the gravel and rock being taken out on a narrow gauge railroad in cars drawn by a locomotive weighing seven tons. The mine is well ventilated, and no discomfort is experienced by the workmen from bad air, 75 of whom are employed at the present time, but soon the number will be increased to two or three hundred. A water-wheel 36 feet and 6 inches in diameter is rigged underground for the purpose of pumping, etc., and is said to be the largest wheel in the State used in that manner. Geological wonders are found in the mine, such as petrified stumps and logs imbedded in the gravel several hundred feet below the surface, and the plain evidences of an ancient river channel.

## SANTA ANA VALLEY.

In speaking of the rapid growth and wonderful productiveness of this valley the *Standard* says:

The effort now being made by the Santa Ana Valley Irrigation Company to raise to the surface the water flowing to waste in the Santa Ana river is being watched with great interest, not only by those directly interested, but Anaheim, Riverside and other places seem much concerned in the project. All realize the necessity of securing an abundant water supply for this section at all seasons of the year, and if favorable indications count for anything, we shall soon have more water than there is land in the valley to irrigate. If an abundant supply is secured, the past wonderful development of this valley will be insignificant in comparison with the progress that will be made in the next two years. People who now think that real estate is held too high here will conclude that the people had been simply giving away their land. The "croaker" will no doubt continue to croak but the country will continue to develop and our exports will continue to increase, until a large train of cars will be required each day to take to market the oranges, lemons, raisins, peaches, apples, pears, apricots, prunes, berries of all kinds, poultry, eggs, butter, cheese, corn and hogs, that are now bringing a constant stream of wealth into this section. With an abundance of water, thousands of new barren acres will be improved and that which is now cultivated will be made to yield much larger crops than ever before.

## SAILING UNDER FALSE COLORS.

A representative of the *Examiner*, recently interviewed several wine merchants of this city for the purpose of eliciting their opinion on California wines. We publish the following:

"I suppose then," said the reporter, "that the taste for French wines is largely a fashion."

"Altogether so," said Mr. Lachman, "as I can show you in a minute. Come with me." He led the way to the back of the warehouse and pointed to stacks of cases bearing the aristocratic brands of Chateau Lafite, Medoc, St. Julien, Chateau Margaux, Chateau Mouton, Chateau Lenville, and half a dozen other castles: "The cases, the bottles, corks and even the wrapping-paper all come from France," said Mr. Lachman, gayly, "but every drop of wine there is pure, unmixed California wine. Those cases go to dealers, are sent all over the country and used by the best class of consumers as high-class French wines. I don't want to do this; no dealer wants to do it; but the trade requires it. I would rather all these cases were sold as California wines, and Mr. Simonin can digest this fact at his leisure—that the best wines of our State are sold as the best wines of his country, and no one is able to distinguish the difference."

Mr. Simonin is the Frenchman who made some untruthful comments, regarding California wines, recently in an Eastern paper.

## A VALUABLE DISCOVERY.

The Los Angeles *Herald* gives, the following account of the Pinacate gold mines:

The gold mines of Pinacate, San Diego county, recently mentioned in the *Herald*, was first worked in the year 1881, when an alleged coal mine was located close by, with the intention of using the output from it to run the quartz mill. The prospect did not pan out well, and wood from the mountains has been used instead of the coal. Recently, however, the old ledge of coal has been developed, and a piece of nearly pure bituminous coal as big as a water bucket is now on exhibition at San Bernardino. The tunnel in the mine is in 56 feet from the mouth of the incline, at which point the vein of coal is five feet and eight inches in thickness. It is seven miles from Pinacate station, on the California Southern Railroad, is called the Cheney mine, and is owned by E. Davis of San Bernardino. Near the mine, which is on the San Jacinto ranch, is found an extensive deposit of gypsum, which, together with coal, afford the means of manufacturing that very necessary article, plaster of Paris. Altogether, this appears to be one of the most valuable discoveries in Southern California.

## ENGLISH WALNUTS.

Experiments have fully demonstrated the fact that English walnuts can be successfully grown in almost any portion of Ventura county. Of course we have spots more favorable to the growth of the nut than others, but it has been pretty conclusively proven that they do well in any portion of the county where anything can be grown. Ventura avenue is particularly adapted to the growth of this fine nut, some of the most beautiful and prolific young orchards in the State being situated there. And furthermore, it has been fully and thoroughly demonstrated by those in the business that it pays to raise English walnuts. Certainly there is no immediate return, but after six or seven years there is an annual and increased return for a lifetime. It is well to lay out an orchard of English walnuts.—*Ventura Signal*.

THE RESOURCES OF CALIFORNIA is the best paper to send to your friends abroad.

O. P. SHEFFIELD. J. PATTERSON. N. W. SPAULDING.

## PACIFIC SAW Manufacturing Company,

17 &amp; 19 FREMONT STREET, SAN FRANCISCO.

## A NEW WOOD SAW!



THE LATEST, THE BEST.

The above illustration shows an AUTOMATIC SELF-TRAINING WOOD SAW FRAME. The saw is strained by means of a steel spring secured to the wood end pieces with Metal Bands. With this device a saw is perfectly and automatically strained at all times. No cross bars or braces are required in giving stiffness to the frame. The space in wood saw frames usually filled up with such devices is left open, giving the saw greater capacity for sawing large sticks of wood, wide planks or boards. There is no screw straining rod to get out of order.

Price, complete with Pacific Saw Mfg. Co's Extra Blade, set and filed, ready to work, each, \$1.50; with their second quality blade, set and filed, ready to work, \$1.25; with imported blade, set and filed, ready to work, \$1.50.

## A LIBERAL DISCOUNT TO THE TRADE.

## AGENTS FOR C. B. PAUL'S CELEBRATED FILES.

Planing Knives, Currier Knives, Saw Mandrels, and Saws of Every Description Made to Order.

## THE CALIFORNIA POWDER WORKS.

**Santa Cruz Gunpowder.**

**HERCULES AND MINING POWDER.**

**SUPERIOR SPORTING POWDER.**

**Pacific Rifle and Pistol Powder.**

**ROUND GRAIN, Bright Glaze, in Iron and Wooden Kegs.**

**SHOT, CAPS, WADES, AMMUNITION, FUSE, Etc.**

**PRINCIPAL OFFICE, No. 230 California Street, SAN FRANCISCO, CAL.**

**STOCKTON**

*Business College*

**F. R. CLARKE, Principal.**

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the Year. Tuition is less than on half usual rates. Excellent board \$10 per month.

**COURSES OF STUDY:**

Full Business Course, Full Normal Course, Teacher's Course, Review Course, Academic Course, Special Courses, Languages.

The College Journal, containing full particulars, sent promptly. Address: F. R. CLARKE, Stockton, P. O. Box 15.

## EDGE HILL

## VINEYARD, WINE CELLAR AND DISTILLERY,

Near St. Helena, Napa County, California.

SCHEFFLER'S CELEBRATED VACUUM DISTILLED

## SANITARY BRANDY

—AND—

## Brands of Red and White Wines.

STANDING COMPARISON WITH THE FINEST BRANDS OF IMPORTED

Burgundy, Bordeaux and Rhine Wines.

Orders Received and Promptly Attended to by

WM. SCHEFFLER,

PROPRIETOR.

## HOME MUTUAL INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY.....1883.

## FIRE ONLY.

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold. - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

## OFFICERS:

J. F. HOUGHTON.....President.  
J. L. N. SHEPARD.....Vice-President.  
CHAS. R. STORY.....Secretary.  
R. H. MAGILL.....General Agent.

## J. D. SPRECKELS &amp; BROS.,

Shipping and Commission Merchants.

## HAWAIIAN LINE OF PACKETS.

325 Market Street.

## SAN FRANCISCO.

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the

## STANDARD SYRUP,

A SUPERIOR ARTICLE.

Put up in Barrels Expressly for House Consumption.

ALSO,

## EXTRA HEAVY SYRUP,

In Barrels for Export.

## REFINED SUGARS,

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.



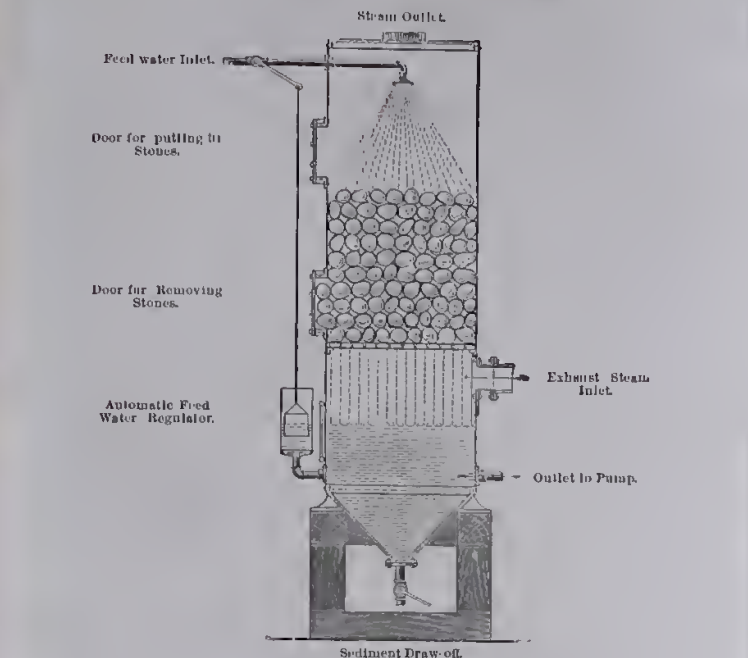
**LLEWELLYN FILTER-HEATER,**

Patent Issued Aug. 12, 1879, Re-issued Aug. 14, 1881.

For the Prevention and Removal of

**STEAM BOILER INCRUSTATIONS**

WITHOUT THE AID OF CHEMICALS.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent. of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.

Further particulars with full descriptive circular and price list can be obtained at the office of the

**LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,**

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufacture, Columbia Foundry, 131 and 133 Beale Street.



OPPOSITE UNION SQUARE.

THE LEADING

**Commercial School**

ON THE COAST.

**LIFE SCHOLARSHIPS**

—FOR—

Business Course. Only \$70.

**NO VACATIONS.**

Day and Evening Sessions.

Qualified Teachers.  
Thorough Instruction.  
Reasonable Rates.  
Superior Facilities.  
Good Discipline.  
Excellent Apartments.  
Healthful Location.  
Ladies Admitted.

Special Inducements Offered to Per-  
sons of Neglected Education.

Business Course.  
Academic Course.  
Combined Course.  
Penmanship Course.  
Modern Languages.  
Photographic Course.  
Special Branches.

For Further Information call at the  
College Office

**No. 320 POST ST.,**

Or Address the Proprietors,

**CHAMBERLAIN & ROBINSON.****FIRE AND MARINE****INSURANCE AGENCY**

OF

**HUTCHINSON****& MANN,**

Nos. 322 and 324 California Street  
and 302 and 304 San-  
some Street,

**San Francisco.**

Agents for The

Agricultural Insurance Co., New York,  
\$1,521,630.

Fire Ins. Ass'n (Limited), London, Eng.,  
\$1,573,291.

Glward Insurance Company, Philadelphia,  
\$1,208,615.

New Orleans Ins. Ass'n., New Orleans,  
\$573,216.

St. Paul F. & M. Ins. Co., St. Paul, Minn.,  
\$1,048,673.

Standard Fire Office (Limited), London, Eng.,  
\$1,300,000.

Teutonic Ins. Co., New Orleans,  
\$418,015.

**MARINE.**

The London and Provincial Marine Insur-  
ance Company, London,  
\$6,278,362.

La Fonciere Marine Ins. Co., Paris,  
\$2,250,000.

Capital Represented. . . \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. E. CHALMERS,  
Special Agent and Adjuster.

**SAN JOAQUIN VALLEY.**

**Its Past and Present—Prospects for the Future—What the Valley Was, What It Is and What It Will Be.**

Under the above heading a correspondent of the *Daily Evening Post*, at this city, furnishes that paper with the following letter. It shows what an important factor the railroad has been in settling up and developing the resources of the State:

TULARE CITY, August 3, 1883.

The capabilities of the San Joaquin valley for producing staple articles of food were comparatively unknown until the wide expanse was traversed lengthwise by a railroad. Before 1871 the section of this great valley devoted to wheat culture did not extend far beyond the southern boundary of Stanislaus county. Along the San Joaquin river, as far up as the mouth of Fresno slough, there were little farms where the land was good upon which wheat for the San Francisco market was grown, but the area was small and the product light. The railroad changed the business aspect of the valley, and, to a great extent, the vocation of its residents. The broad level of sheep walk and cattle range suddenly acquired a value that the oldest inhabitant never dreamed of investing it with. In answer to the question of why he did not acquire possession of a part of Kern River island at a time when the best land in the upper part of the valley could be had for a song, ex-Senator Tom Fowler, of this county, one of our oldest residents, and one of the keenest, far-seeing business men in the State, replied that in those days he had no idea that the county would ever be fit for anything but a stock range. "But," he went on to say, "the railroad has doubled, yes quadrupled, the average value of every acre of land within an area of 300 miles in length by fifty in width." There is nothing extravagant in Fowler's statement. The most uncompromising hater of everything that aids development and improvement must admit that within a decade the railroad has increased the population and widened the area of cultivated lands of the San Joaquin valley beyond what could have been expected during a half century under the old slow and expensive mode of transportation. Modesto, Merced, Tulare City, Fresno and a dozen or more smaller towns and villages in the valley, with their aggregate population of 12,000 or 15,000, and their wealth of several millions, are the creations of the railroad. But for it these towns would have had no existence, and but a small proportion of their people and property would have found a shining place there. The expansion in value is only circumscribed by the mountain ranges that bound the great valley. Where the overland stage dragged its slow length along between the San Luis ranch and Bakersfield, the traveler saw but few houses besides the stage station bums, and once out on the plains his chance for finding lounges in trees, books in running brooks, sermons in stones and good in everything, was so slim as to make it no chance at all, for he it known, there were no trees, no brooks, very few stones and good in nothing. With the railroad came a change in the aspect of the valley which is growing more marked year by year. Now, in many localities farmhouses dot the expanse as far as the eye can reach and around many of these houses there is a small grove of trees, generally uncultivated or artificial growth. The number of houses is steadily increasing and the area of lot age is rapidly widening. Before the railroad there was nothing of this. Should we have had it now had there been no railroads? I doubt it. The man whose home is in a sheep-herder's wagon, does not build houses, and the man whose value is gauged by the number of cattle he may graze upon it does not plant trees. The railroad has made it possible to turn the sheep-walks and cattle ranges into farms, and out of this possibility has grown the probability that in a few years good crops from these farms can be relied on with as much certainty as the coming of the seasons of seedtime and harvest guaranteed by a law of promise. It was but a little while ago, as we all remember, that a dry season meant a total loss of the husbandman's labor in the San Joaquin valley. Light rain was the handwriting on the wall that needed no interpreter. To the farmer it said, you will have no harvest, and to the stock raiser it said, you must hasten to the mountains if you would save your flocks. From this year of 1883 onward a total failure of crops in this valley will be impossible, and each year will decrease the proportion of loss from drought. There is water enough flowing into the valley, even in the driest years, to sufficiently irrigate every tillable acre between the Sierras and the Coast range. The requirement is economic utilization of the supply. Already the facility for artificial irrigation guarantees, so far as abundant moisture will guarantee, an annual crop from many thousands of acres of land in this valley. These facilities are increasing in a ratio that promises an annual addition of thousands of acres to the irrigated section. One need not be a prophet to foresee the coming day when a dry season will not materially reduce the aggregate wheat, wine and fruit product of the great San Joaquin valley, nor does it require the prescience of the sage to anticipate the time when a valley that, before the railroad, found occupation for but a few thousand people, will give homes and employment to a mil-

lion and produce the food of several millions. The railroad brought us a market for our products, and that we may make the volume of our products equal the demand of that market, we shall go on making artesian wells, digging canals and building reservoirs until we have a sinking fund of moisture upon which we may draw, without fear of drought, against the demands of the driest season. All this can not be done in a day or a year. It is the work of time—and time you know works wonders. The change between the time when there was no railroad and now is wonderful; but the change in the value of our lands, in the volume of our products and in the general appearance of our great valley, at the close of the next decade, will be still more wonderful.

TULARE.

**OLIVE CULTURE.**

We are glad to note that the growing of olives is again attracting public attention. From time to time the *Herald* has brought the subject before our people, for we have always believed that olive oil will be one of the staple productions of our southern country. Americans, as a rule, are too impatient of delay of any kind, and it has been objected to the olive, as to the cork oak, that it is of a growth too slow to make its cultivation a paying investment. This, however, is not true in fact. The trees which have yielded an annual return to Mr. Cooper, of Santa Barbara, of \$2,200 per acre are but eight years old. This is a very good return on the original outlay and expense of cultivation. And, as the tree grows older its yield is greater, and the product is of a better quality. Some of Mr. Cooper's oil was exhibited last year at our annual fair, and was pronounced, by competent judges, to be of superior quality. It was certainly better than any imported from abroad, for not a drop of virgin olive oil ever comes to this country. What we do get is adulterated with the oil of cottonseed, which we export in great quantities for that use only, the oil of turnip seed, and other vegetable oils. Most of the comers among us, seeing a few mostly looking olive trees in an out-of-the-way corner of some fence, conclude that it will not do to cultivate it. Now cultivation is just what the trees referred to do not get. Any tree which is neglected will not do well, and the olive responds with notable quickness to kind treatment. It can grow with very little irrigation; indeed, in some soils, and after attaining a certain growth, it wants none except what falls from the sky. But no man expects an orange tree or a vine to yield fruit without cultivation, and the olive needs it also. In the south of Europe, generations of the same family have lived on what groves of twenty and thirty olive trees have produced to them, for the tree lives for centuries. Having reached the shore of the Pacific at last it is probable that Americans will lose that hereditary unrest which has characterized them, and that hereafter men will be content to live and die on the farms that were their fathers'. The rancher who plants the olive will be wise, and his children's children will revere his memory.—*Los Angeles Herald.*

**WHAT WORK WILL DO.**

The two Woolf brothers, of this county, deserve commendation for what they have achieved on a few acres of land in Upper Placerville. They came here about nine years ago without any money to buy a good place, and had to be contented with a few acres of a very undesirable rocky hillside covered with brush and small trees. Despite all these difficulties, they went to work with a will, dug up the rocks, carried them down into the cuts, cleared off the brush and soon had some of the land ready for cultivation. They planted trees, small fruits and vegetables. They now have about 600 young fruit trees that have been bearing four years, and from which one year they sold \$250 worth of dried and \$150 worth of green fruit. Every year they cleared more land till now they have fifteen acres under cultivation. In response to inquiries the brothers said that their strawberry and onion beds were most profitable. They also realize much from currants, blackberries and watermelons. An inspection of all these beds shows that the brothers are earnest workers who understand their business. Their onion bed is about an eighth of an acre in extent. On this small piece of land they raise on an average two tons of onions every year, which at \$35 a ton would amount to over \$500 to the acre.—*El Dorado Republican.*

**CALICO DISTRICT.**

The *Calico Print* says: Mining men, who looked upon our camp a year ago with distrust, have somewhat changed their opinions, and acknowledge that the mines have a brighter prospect than they supposed they would have by this time. The large quantity of high-grade ore that averages over \$500 a ton, and the immense amount of low-grade ore that averages over a ton, are facts that leave a favorable impression on the most stubborn mind.

**FRUIT BASKETS.**

Baskets with all the varieties of fruits now ripe and raised in Los Angeles, are sold to tourists passing through the City of Angels.



SOMEWHAT ABOUT SHASTA COUNTY LANDS.

An old resident of Shasta county writes from North Cow Creek to the Redding Independent as follows, which will interest immigrants in search of cheap land:

There are thousands of acres of red land in this county that are as good as can be found in any part of the State that will produce as fine fruit as is found in the United States. A great deal of the land will grow excellent grain, wheat, rye, barley and oats, all of an excellent quality.

We will admit that part of it will not yield as much per acre as black loam bottom land, but one must consider the difference in price. Good bottom land is worth from \$10 to \$35 per acre, while the red land can be obtained by paying \$22.50 for a hundred of 160 acres or by paying to R. R. Co. \$1.25 to \$1.50 per acre, who will give a long time to make the payments. School lands, which are sections 10 and 36 in every township, can be bought from the State at \$1.25 per acre, in tracts of 320 acres. We are safe in stating that there is 50,000 acres of Government, Railroad and school lands vacant in townships 31, 3 W., 31, 4 W., 32, 3 W., 32, 4 W., all of which lie east and southeast of Redding. A very large track of this lies between Stillwater and Little North Cow Creek. Most of this will make desirable homes, close to market, and in a good healthy climate.

Another large body of it lies east of Little Cow Creek and Oak Run. A great deal of this is broken, but a number of excellent locations can be found. There is also a track lying between Stillwater and the Sacramento river, directly east, southeast and northeast of Redding, which offers to settlers inducements equal to the aforesaid mentioned tracts. It will pay energetic and industrious immigrants to come to Shasta and look at her lands before going elsewhere. I do not wish it understood that I have spoken of all the vacant lands in Shasta county, but only a small fraction of the vast tracts, uncultivated in this county. Fall river valley, about 60 miles northeast of Redding is a beautiful one and the day is not far distant, when it will all be settled up. The soil in this valley is for the most sandy, loose and alluvial.

There are several other small valleys within ten and twenty miles of it where good homes could be obtained. All these valleys in this county are well watered and supplied with plenty of good timber near by. The mountains are rough but covered with an excellent quality of timber interspersed now and then with level tracts which make very fine garden spots.

Another fine tract lies east of Millville which is suitable and very desirable for farming and grazing purposes. This entire county is well watered by numerous mountain streams the majority of which afford water the entire year. Many of these streams, pure as crystal, abound in mountain trout, salmon, etc.

The people as a general thing are industrious, enterprising and ever ready to welcome the new comer who is willing to take hold and improve the country.

Good schools exist throughout the country in season from six to eight months in the year. We also find here as nearly everywhere else, a few squatters, which are of no benefit to the community, but as the country settles up with good working people, they are sure to leave for more distant parts, to the country abounding in wild hogs, cattle, etc., where they can live without work.

GOOD QUARTZ.

Quartz prospecting is all the rage on the East Branch, and some good ledges are being opened. The work on the Halstead ledge, on Rich Gulch, proves that it is rich and of vast extent, and several other fine croppings have been found in the same locality. One day last week Mr. McPherson, of Meadow Valley, found what is supposed to be a northwest extension of the Halstead ledge, on the Deadwood side of the mountain, and he has quartz which shows free gold and is very rich. Fred. Lewis has some good quartz, and the indications point to a large and lively quartz mining camp at that place in the near future. — *Plumas National.*

We have no doubt that Plumas will prove one of the best quartz mining countries in the State when her resources in this direction are developed. Several years ago while we were visiting Rich Bar we were shown, by Richard Irvin, about fifty pounds of gold-bearing quartz, not quartz bearing gold, for we estimate that there was more gold, in weight, than there was quartz. The specimens were taken from croppings found on French creek, not far from the bar. As to whether the main ledge was ever discovered or not we have never learned. The many bars and river bed of the East Branch have been very rich, and a great many quartz ledges crop out between Soda bar and the junction, which are undoubtedly rich in gold. Quartz mining in Plumas, like nearly all the countries of Northern California, has been kept in the back-ground for the want of capital to prop-

erly prospect, but now that there is a large amount of idle means in San Francisco we have no doubt that the owners of some of it will soon seek Plumas county as a base of operations. If one-quarter of the money that has been paid in wildent speculation in the silver mines of Nevada had been spent in developing quartz in Plumas county there is no doubt that the output of gold would rival in value that of the silver yield in the whole State of Nevada. There are several well-paying mines now being worked in Italian Valley, and it would be idle to say that there is not just as good quartz in other parts of the county. The richness of the many river bars and the occasional finding of rich rock in the hill sides all goes to prove that quartz bearing gold abounds throughout the entire county. Now that railroads are pushing their way into Plumas county her resources will soon be brought more prominently before the people, and the needed capital for development will not long be wanted, and when this comes a bright and prosperous future will be open to her. — *Oroville Mercury.*

PROFITS OF GRAPE CULTURE.

R. B. Blowers, of Woodland, in an interview with a newspaper reporter, gives some interesting statistics concerning the profits of grape culture. He says:

I have made 250 boxes of raisins from one acre of vines, worth from \$2 to \$2.50 per box. Of shipping grapes the yield will average ten tons to the acre, and four tons per acre of wine grapes. Table grapes bring \$40 per ton; wine grapes from \$20 to \$30 per ton. For shipping, I use the Emperor, which yields as high as fourteen tons per acre. Preparing the ground is but a trifling cost, probably \$1 per acre. I estimate the first cost of planting a vineyard all the way from \$20 to \$40 per acre, including the first year's cultivation, irrigation and watered vines. A vineyard, if handled with judgment ought to come into profitable bearing in three years. I have a small patch of seedless Sultanas three years old. I got five tons for the third year, ten tons for the fourth year, twelve tons for the fifth year and seventeen tons for the sixth year. I do not believe that grape-growing will be overdone for a great many years. Whenever grapes become unprofitable for raisins, we can feed them to our pork, and then raisins will soon be in demand again. Grapes will fatten pork faster than any other known food. Hogs fed upon this food will increase from two to three pounds per day. The greater portion of our northern grape growers do not use irrigation at all. In Sonoma and Napa valleys, and in the Vacaville belt, they do not irrigate. But in that part of the State where the annual rainfall is small, say in Fresno and the great interior valleys, they have to resort to irrigation. I think I can safely say that the profit on the better class of raisins is at least \$100 per acre. For the past six years the profits have averaged over \$100 per acre. I have a neighbor who has five acres. He has made as high as \$1,000 clear profit from the five acres, and hired all his work done. I can state approximately that I believe there are about 100,000 acres of grapes at the present time planted in California, but not that many acres in bearing—nearly half is in new vines. The greatest success, so far as I have knowledge, must be credited to small vineyards, well cared for, as against large vineyards. I think this is the universal judgment of vineyardists generally. We can not expect to find any soil in the world to yield well year after year without fertilizing. The seedless Sultana has yielded me 44 tons to the acre, but it would be preposterous to expect it to keep that up without fertilizing the soil. If the soil is properly fertilized the vines will bear up 100 years.

IMMIGRANTS.

The effect of cheap and rapid transit from Southern Europe, via New Orleans, must soon bring to Southern California immigrants to whom our climate will be as grateful as that they leave, and who are skilled in vine-dressing and wine-making, as well as in other branches of husbandry which have found a congenial home among us. The loss of the immigration now going by us to our northern neighbors will be more than compensated by the acquisition we shall receive presently from France, Spain and Italy. — *Los Angeles Herald.*

A LOGGING RAILROAD.

The Truckee Lumber Company, says the *Republican*, are building a narrow-gauge railroad up Washington Creek, about half-way between Truckee and Tahoe City. They now have about a half mile completed, and will commence logging over it next week. It is to be built back about a mile and a half from the river.

GOOD YIELD.

Thirty-four thousand dollars was realized from the last two months' cropping at the Marguerite quartz mine. — *Bonaville Messenger.*



TIME TABLE.

Commencing Monday, Sept. 3, 1883,

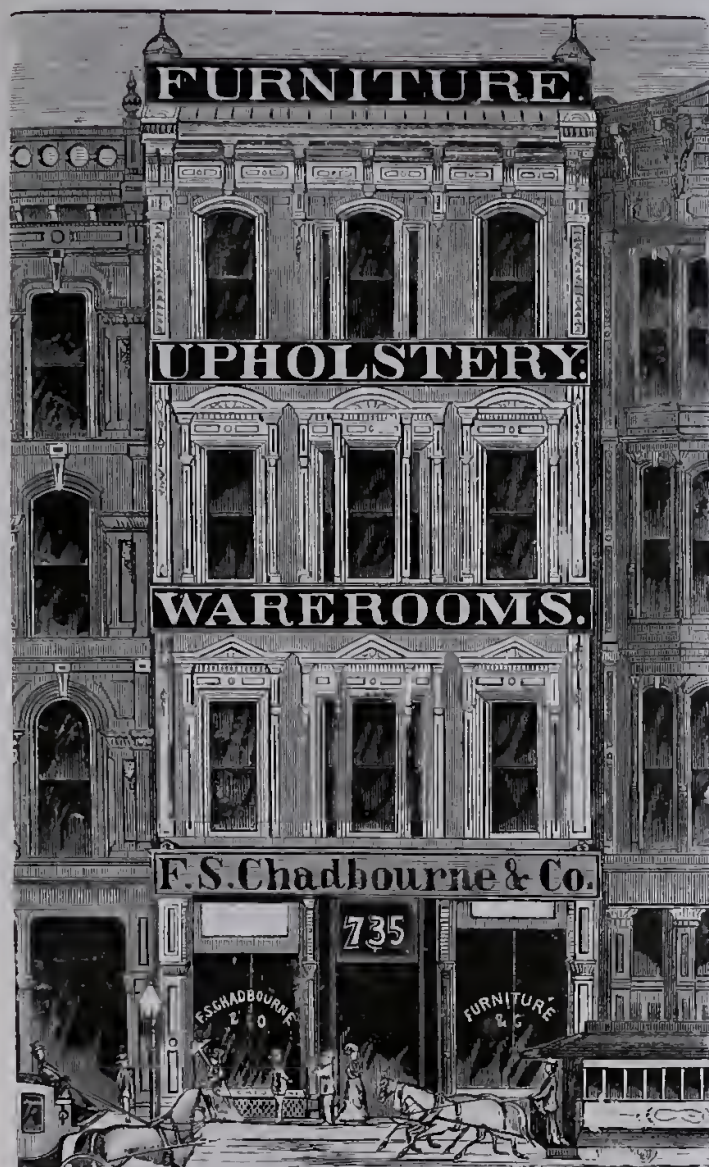
And until further notice, Passenger Trains will leave from, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
8:30 A. M.		6:40 A. M.
9:30 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M.
4:40 A. M.		2:40 A. M.
5:40 A. M.		3:40 A. M.
6:40 A. M.		4:40 A. M.
7:40 A. M.		5:40 A. M.
8:40 A. M.		6:40 A. M.
9:40 A. M.		7:40 A. M.
10:40 A. M.		8:40 A. M.
11:40 A. M.		9:40 A. M.
12:40 P. M.		10:40 A. M.
1:40 P. M.		11:40 A. M.
2:40 P. M.		12:40 P. M.
3:40 P. M.		1:40 P. M.
4:40 P. M.		2:40 P. M.
5:40 P. M.		3:40 P. M.
6:40 P. M.		4:40 P. M.
7:40 P. M.		5:40 P. M.
8:40 P. M.		6:40 P. M.
9:40 P. M.		7:40 P. M.
10:40 P. M.		8:40 P. M.
11:40 P. M.		9:40 P. M.
12:40 A. M.		10:40 P. M.
1:40 A. M.		11:40 P. M.
2:40 A. M.		12:40 A. M.
3:40 A. M.		1:40 A. M



F. S. CHADBOURNE &amp; CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



IMPORTERS, MANUFACTURERS,

—AND—

Wholesale and Retail Dealers in  
**FURNITURE AND BEDDING**  
**OF EVERY DESCRIPTION.**

Chamber, Parlor, Library and Dining  
 Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish  
 Easy and Lounging Chairs, Etc.—Hotels and Private  
 Residences Furnished.—Designs Furnished  
 and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

## YOSEMITE FALLS.

Among the innumerable descriptions of this wonderful cascade, we think the following, taken from *Blackwood's Magazine*, is, at least as good as any of them:

No wonder the Indians reverence the beautiful Yosemite Falls. Even the white settlers of the valley cannot resist their influence, but speak of them with an admiration that amounts to love. Some spend the winter in the valley, and they told me that if I could see the falls in their winter robes, all fringed with icicles, I should gain a glimpse of fairy land. At the base of the great fall the furies build a real ice palace, sometimes more than 100 feet high. It is formed by the ever-falling, freezing spray, and the bright sun gleams on this glittering palace of crystal, and the falling water striking upon it shoots off in showers, like myriads of epals and diamonds. But when I first beheld them, on a bright May morning, not an icicle remained, and the falls were in their glory. I had never dreamed of anything so lovely. I confess that I am not a keen lover of waterfalls in general, and am often inclined to vote them a bore, when enthusiastic people insist on leaving the blessed sunshine to go erring far down a dark, damp ravine, to see some foolish drizzle. But here we stand in the glorious sunlight, among pine trees a couple of hundred feet in height, and they are pignios, like ourselves, in presence of even the lowest step of the stately fall which leaps and dashes from so vast a height that it loses all semblance to water. It is a splendid banquet of glistening rockets, which, instead of rushing heavenward, shoot down as if from the blue canopy which seems to touch the brink, 2,700 feet above us, like a myriad of falling stars they flash, each keeping its separate course for several hundred feet, till at length it lends with 10,000 more in the grand avalanche of frothy, fleecy foam, which forerunner and forerunner falls, boiling and racing like a whirlpool, among the huge black boulders, in the deep cauldron below, and throwing back clouds of mist and vapor. The most exquisite moment occurs when you reach some spot where the sun's rays, streaming past you, transform the light vapor into brilliant rainbow prisms, which gird the fall with vivid iris bars. As the water rockets dash through these radiant belts, they seem to carry the color onward as they fall; and sometimes it wavers and trembles in the breeze, so that the rainbow knows not where to rest, but forms a moving column of radiant tinsel. So large a body of water rushing through the air naturally produces a strong current, which, passing between the face of the rock and the fall, carries the latter well forward, so that it becomes the sport of every breeze that dances through the valley; hence this great column is forever vibrating from side to side, and often forms a semi-circular curve. The width of the stream at the summit is about 20 to 30 feet, but at the base of the upper fall it has expanded to a width of fully 300 feet; and, as the wind carries it to one side or the other, it plays over a space of about one thousand feet in width of precipitous rock-face, 1,600 feet in depth. This is the height of the upper fall.

## A VALUABLE MINE.

The recent rich strikes in the Hurtery mine and the Porin mine have given new stimulus to the mining interests in that section of the district, and shortly the Consolidated Love Tree will resume work. The property is situated at Forest springs and is a location of 3,000 feet, embracing three separate ledges, one of them being two and one-half feet thick and the others averaging eight inches. There is a tunnel on the property 700 feet in length, which cuts all three ledges, and also several shafts sunk down, which cut ledges. Pan washings from one of these shafts yielded from \$2.50 to \$15 to the pan, and much of the gold was in large lumps. About \$9,000 have already been expended on the property, and with it is the opinion of miners that there would be a paying mine there. Men are now at work putting the tunnel in order preparatory to going to work. Some rock recently taken from the two and one-half-foot ledge shows free gold.—*Grass Valley Tidings*.

## NOW AND THEN.

In 1816 one bushel of corn would buy one pound of nails. In 1883 one bushel of corn will buy fifteen pounds of nails. In 1816 it took from 20 to 30 dozen of eggs to buy one bushel of salt. In 1883 one dozen will do the same thing. In 1816 it required 54 bushels of barley to buy one yard of broadcloth. In 1883 five bushels will do the business. In 1816 it required one bushel of wheat to purchase one yard of calico. In 1883 one bushel of wheat will buy 35 yards of a better article. In 1816 a pair of wooden blankets cost as much as a cow. In 1883 a cow will buy from six to twenty, superior in every way.—*Practical Farmer*.

## SILK CULTURE.

There is no reason why, among other profitable industries prosecuted in this State, that of silk raising should not become prominent. The climate of California seems to be peculiarly adapted to it. There is no disease among the silk worms or mulberry trees of this State. There is no particular feature of industry which so commends itself to those wishing for some occupation which can be prosecuted at home. It does not require a large capital and it may be made a domestic industry. It would give employment to hundreds of children that are now being reared in idleness, that worst of all schools for the young, and it would be a profitable and not unpleasant occupation for women who are dependent upon their own exertions for support, yet who shrink from going out of the shelter of their own homes to find employment. The ladies in the vicinity of Los Angeles, as well as those in other parts of the State, are engaging, this season for the first time in silk culture, and with every prospect of success. Those who are unfitted by feebleness or by habit more accustomed to labor, for the prosecution of anything requiring laborious or continuous effort, would find in this industry pleasant occupation, requiring neither mental nor physical strain, and always sure in its results.

The industry is growing in the United States, yet the amount raised is a cipher compared with the demand for the raw material to be used in manufacture. The value of the silk manufactured in this country amounts to about \$50,000,000 annually. Of this raw material used about \$35,000,000 worth is imported. For this there is no excuse. All of this might be raised at home, and the money be kept here, adding so much to the general prosperity of the country. The American product is not excelled by that raised in any other part of the world, so we would have nothing to fear from the results of competition. In Pasadena the industry has been introduced on a small scale, but with encouraging results, and there is no place in Los Angeles county where it might not be profitably undertaken. The question of a market would not be a troublesome one, as the California Silk Culture Society will purchase all raw material at high prices. The entire time from the hatching of the worm to the gathering of the cocoons is two months.—*Los Angeles Times*.

## TIMBER CULTURE.

Here is a terse, timely and entirely practical suggestion from a contemporary, which we desire to endorse, reinforce and make applicable here. It is from the *Ventura Free Press*:

"Can't every farmer in the county, some Saturday afternoon, when the horses are pretty tired of dragging the gang plow, give them a rest, and with all his men devote three or four hours to tree-planting? Any trees—locust, walnut, cypress, blue gum—anything to break the monotony of the landscape and make it beautiful, besides furnishing fence-posts and firewood in the near future. Do this, and in two years you will thank us heartily for the advice."

If such a practice was energetically inaugurated and energetically kept up, at proper seasons, for a few years, the whole surface of our treeless country would be transformed. The culture of timber would be followed not only by the good results pointed out, but it would have a large influence in warding off droughts and in protecting the sources and preserving intact the volume of our streams, which supply the life-blood to our soils and make cultivation possible when otherwise only an arid desert would stretch its repellent wastes. Let the spirit of tree-planting and timber culture once take full and complete possession of our farmers and ranchers and the good that would follow to individuals and the public in half a decade would be simply incalculable and immeasurable.—*Los Angeles Mirror*.

## SOUTHERN CALIFORNIA MINING.

As a sample of the profit of quartz-mining, the case of the Idaho mine, at Grass Valley, Cal., may be cited. This mine, which cost \$90,000 to get to work, has paid, in dividends, since 1868, forty times the cost of the mine and machinery, and still the old mine yields on as before, and has yielded over \$6,000,000; about \$3,000,000 of which has been paid for labor, and \$3,000,000 is dividends. Such examples of mining prosperity in Nevada county are very good, and will be duplicated in Southern California at an early day. The Oro Grande pays for itself once a week. That is certainly a very good showing for this part of the country. Mining has passed the stage of experiment in Southern California. The mills of Pinnato, Oro Grande, Calico, Providence, Daggett, Watman and Inyo county, are all doing well, and making most gratifying returns. The best mines of Southern California are to-day worth \$100,000,000, while the sole mines can supply the world with that indispensable article. We are just beginning to learn mining in this part of the country.—*Cor. Los Angeles Herald*.

Subscribe for THE RESOURCES OF CALIFORNIA.





FERRYING IN THE MOUNTAINS.



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, OCTOBER, 1883.

ESTABLISHED, 1870.  
Office—320 Sanson St., Rutledge Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM.**  
**Six Months, \$1.25—Postage Paid.**  
**SINGLE COPIES, 20 CENTS.**  
**ISSUED MONTHLY.**

## BUTTE COUNTY.

**Its Towns, Railroads, Rivers and General Resources Described.**

[By our Traveling Agent, JAMES C. KEMP.]

Butte county, considered every way, is one of the very finest in the State, embracing both agricultural and mineral lands, with a total area of 1,746 square miles, 600,000 acres of which is covered with a growth of magnificent timber. It is bounded on the north by Tehama county, east by Plumas, south by Yuba and west by the Sacramento river.

The soil of the valley portion is a rich black adobe, which is very productive, while that of the foothills is red land, especially adapted to the grape and every kind of fruit common to the Golden State. The early miners considered this land worthless, but experience has demonstrated the exact opposite to be the real case, and at the present time innumerable ranches of the very choicest fruit are scattered throughout this whole foothill belt. Between Marysville and Chico the writer noticed thousands of pear trees, loaded down with ripe fruit, growing out upon the open plain without one particle of irrigation, and that, too, in this comparatively dry year; and he was told, by old settlers, that there is no necessity whatever for irrigation in any part of the county.

The California and Oregon Railroad runs direct through that portion situated on the east side of the Sacramento river, and another railroad (20 miles in length), connects Oroville with Marysville.

Butte county has quite a number of beautiful towns, at the head of which is Chico, with a population of about 5,000. Next comes Oroville and then Biggs, Gridley, Live Oak and Cherokee, and the mining localities—Bangor, Wyanlotte, Forest-town, Mountain Home, Doughtown, Lovelocks and Inskip. Besides these are several smaller towns, among which are Dayton, Nelson, Nord and Durham.

### Chico

Is the largest, most important and one of the finest places north of Sacramento. It contains many wide and elegant streets, shaded on either side by tall trees of many years growth. It also has a considerable number of very fine residences, built in strictly metropolitan style, which, with the elegant equipages that can be seen daily driving along its broad thoroughfares, causes one to almost forget for the moment that it is so far removed from San Francisco or Sacramento.

Chico has several fine hotels and restaurants; the Union standing at the front, while the Chico Restaurant is very popular with the average traveler, who seeks plenty of good food and low prices.

There are many large stores with very heavy stocks of goods, and two moneyed institutions, namely the Bank of Chico and Bank of Butte. Gen. John Bulwell has a splendid flour mill of great capacity, while the Sierra Plume and Lumber Company has an immense lumber yard filled with every description of building material, shingles, fencing, etc.

The town is lighted with gas, having its own gas works. There are also iron works, carriage factories, a fruit-drying establishment, brewery and soda works. There are two newspapers the *Chronicle* and *Record*, several public, as well as private, schools, presided over by a corps of qualified teachers.

Business is decidedly good, it being the distributing point for a very large section of the mining country belonging to Plumas county. The town is constantly growing, and is even now one of the prettiest places in the whole State.

### Oroville

The county seat, is the next in point of size. It is

Durham is a small but flourishing town some seven miles south of Chico.

Chico is the great mining center of the county. It has several hotels, plenty of saloons, blacksmith shops, etc. Its mining resources are very great.

Within the past four years the people of Butte county have awakened to the fact that their section is among the very best in the State, and in a few years the viticultural interests will be of immense importance. The mere fact that the most splendid Bartholomew pears can be grown there, without irrigation, settles the whole business, and the great interest that is now taken in fruit raising, and has been for a few years past, will shortly bring it up to the very front rank.

Well may the citizens of this favored county be proud of its splendid placer, quartz and deep mines; a magnificent belt of fruit country (second to none in the State), extensive forests of sugar

### OLIVE CULTURE.

Some of the most experienced fruit raisers in this section, as well as those in other parts of the State who have studied the subject scientifically, agree that the foothills are pre-eminently adapted to the successful cultivation of the olive. Treating the subject of olive culture the *Klamath* says:

With the remarkable variety of fruits which California possesses, the increase of the cultivation of the olive will complete a list which no other country can exhibit. We apparently combine all classes of production, and the climate possesses a vitality and adaptability unknown to other regions either on this continent or beyond the sea. In Italy, where the olive reaches its highest state of cultivation, the characteristics of soil and climate are strikingly similar to those along the foothills of Southern California. The tree is vigorous, and, while singularly sensitive to frost, will endure wet and cold without any appreciable influence. It thrives, however, best in even temperatures. Its productive qualities excel those of any other fruit. It lives almost forever. Along the shores of the Mediterranean are groves that are contemporaneous with the Empire of Augustus, and are said to have sheltered in their quiet shade the Huns who overran the country and subdued the republic. The trees are slow in growth, but once arrived at maturity the season will be a strange one which will prevent their making a liberal return for the careful attention of the husbandman. No more profitable industry can be conceived, if, as alleged, the olive will grow in a large area of California soil. That, of course, is a matter which actual experiment can only determine. But the possibilities which the culture of the tree may develop are certainly sufficiently inviting to enlist the capital and enterprise of the fruit-growers of the Golden State.—*Placer Herald*.

### RICH MINES

The Los Angeles Times makes the following mention of some of the principal mines of the famous Calico District, San Bernardino County:

Mr. J. A. Whitmore, of Calico, showed a *Times* reporter Friday, some specimens of Calico ore. One chunk from the Invinible, that presented a beautiful appearance from the oxides of iron with which it was covered, assayed \$6000 in silver to the ton. By scraping it with a knife the horn silver could be easily distinguished. A lot of waste rock and dust from the tunnel of the same mine assayed as high as \$200. Another piece of ore from the same mine, but a very rich specimen, is worth \$3 per pound, just as it is in the rough. Other chunks were antimony, zinc, lead and silver. There was a sample of the Garfield mine, owned by Mr. Raymond, of the old-time firm of Raymond & Ely, so well known to all old Californians. It was a portion of fourteen tons sent to San Francisco, for which Mr. Raymond received the snug amount of \$8750. Mr. Raymond said when he first went to Calico that he was going to make his "shook," and the report is that he is doing so. One lot of rock-dust was fairly black with horn silver. The King mine is down three hundred feet, and has the richest of ore. The Barnum-Moscow is a good mine, but is in litigation. All the mines there are good. Mr. Whitmore is at present Superintendent of the Invinible. He was past proprietor of the Tucson Citizen till he came here.



THE OLD MISSION CHURCH, NEAR MONTEREY—BUILT IN 1794.

situated on the south bank of the Feather river, some 25 miles south of Chico. In 1856 it was one of the liveliest places, for its size, in the whole State. Placer mines surround it on every side, while the intervening land, between it and Marysville, is especially adapted to raising wheat and other grains. It has a population of 2,500 and contains many fine buildings. The Court house cost \$25,000. The United States and Union are the two principal hotels. Lake Chico it has expensive gas works and the finest water works in Northern California, with a twelve-inch main and 150-foot pressure. Oroville has a splendid flour mill of 150 barrels per day capacity.

There are several stage lines running to the surrounding towns, which, together with its placer mines, give it the true old time look, so pleasant to the memory of the miner of the early days.

Biggs and Gridley are both lively and growing places, with fine streets, laid out at right angles, lined with shade trees and combining very fine public and private buildings. Each, too, has its large grain warehouse and railroad depot; immense quantities of wheat—in sacks—can be seen on every hand.

Nelson is a busy little town, about midway between Biggs and Chico. It has a splendid school house, erected at a cost of some \$10,000.

and pitch pine and an area of 200,000 acres of rich, level valley land, adapted to all the cereals; railroad communication with the whole Union, and a most delightful as well as healthy climate; educational facilities of the highest order, and churches of every denomination; an unusually heavy crop of the very finest quality of wheat this present season, with an almost absolute certainty of being able to raise one every year, and all this put together, reader, constitutes the improvements and resources of Butte county.

### THE EL DORADO DISTRICT FAIR.

In speaking of this fair, recently held at Grass Valley, the Nevada daily *Enterprise*, says:

It was a success. Some of the departments, notably the mechanical, stock and poultry displays, were not as well filled with exhibits as could and should have been the case, but such an event as a fair was a novelty in this part of the State. Great improvements may be looked for another year. The management of the business has, in all its details, been admirable, reflecting the highest credit upon the members of the board. Messrs. Dibble, Huberts and Stibger, of this county, have displayed especial energy and tact, and they have been well supported in their efforts by most of the citizens of Grass Valley and the county.



### A BUTTER RANCH 7,000 FEET ABOVE THE LEVEL OF THE SEA.

A representative of the *Index* recently visited the famous Bear Valley, about ninety miles east of San Bernardino by wagon road, and about half that distance by a trail through the mountains by way of the Santa Ana River. The trail leads past the celebrated fish pond of Captain Jenks', and Bear Valley is distant from there about ten or twelve miles over a very steep mountain trail, which in a distance of two or three miles does not contain a level spot large enough for a horse to stand on. Bear Valley is a sort of plateau surrounded by mountains on every side. It is an extensive, beautiful and well watered valley, there being several thousand acres of level land covered with a luxuriant growth of grass. Large herds of cattle, horses and sheep are pastured on this large range for six or eight months in the year, when the snow begins to cover up the grass and the animals are driven on to the desert or down into the valley. Bear Valley was the scene of a great mining excitement about nine years ago, and a town of a hundred houses or more sprang up, but the excitement died out and the town is now deserted with the exception of Sam Beard and wife, who are taking care of the property for the owner, E. J. Baldwin. Mr. Beard was formerly a well known mining man, but has snuk out of the recollection of almost everybody in his mountain retreat. Gus Knight, assisted by his family, runs a dairy and large stock ranch about three miles from the town down the valley. Thirty cows are milked daily, and a hundred pounds of cream are churned at a time. About two tons of butter are produced in the summer season. It is very cold in the valley at night, and a cup containing about an inch of water placed by our correspondent within eight feet of a blazing fire, that was kept up all night, was frozen in the morning. Snow fifteen or eighteen feet deep lies in the deep canyons of Old Gnyback, a few miles away. Under these circumstances it is not strange that the butter is well preserved.—*San Bernardino Index*.

### SANTA CLARA VALLEY.

In every direction in this valley may be seen the results of cutting up the small farms. Hundreds of homes have already been made of five to twenty acres of land, and this year the process of subdivision is going on more rapidly than ever. At every two trees are being planted, wells are being bored and preparations made for more new homes. And this is the right use for such a valley as this. It was made for the purpose of providing healthful homes for people of education and refinement. Its fruit trees and vines can be cultivated without much hard labor, and these products can be made to maintain their owners in comfort and independence. It is not too much to say that ten acres of land in this valley, well cared for, will yield as much actual profit as a hundred acres in most other parts of the world. And the work and expense of caring for the one is really but a little more than a tenth part of what is required for the other.

These facts are becoming known in all parts of the country, and thrifty citizens are flocking hither to escape from the dreary routine of hard labor in the Eastern States, to the comparative ease and independence offered here. People of intelligence also desire to escape the Arctic rigors of the winter, and the equally disagreeable and debilitating effects of the hot summer. And every one that comes sends for his friends and neighbors. There is no dissatisfaction, and indeed he must be hard to please who is not suited with the conditions of life here. Of course there are few chances to make fortunes, but wise men know that money is in

no sense to be compared with health and comfort, and they make their arrangements accordingly.—*San Jose Times*.

### AN ELOQUENT PASSAGE.

Henry E. Highton, the grand orator of the Grand Lodge of California, delivered a very able address upon the laying of the corner stone of the Garfield monument in this city on the 24th of August, from which we quote the following:

Here chivalry and beauty, the distinctive and yet blending types of the North and of the South, are united in the hearty endurance of the great West. We are here in the name of all that is pure and true and self-denying, stern in principle and flexible in manner, in the theories and practices of civilized men. We are here where the softest skies are mirrors of the beauty and majesty of the earth, in bird and flower and fruit, and in the rugged mountains that tower towards the heavens, while their broad bases unite us indissolubly to the Union. We are here—O land, dear to my soul! where life blooms and ripens by almost imperceptible processes, and age itself freshens in the fountain of a perpetual youth. We are here—O men of many climes, and many industries and many sentiments!—to blend into a pathetic harmony beside the murmuring sea, to collect and distribute through the arteries of the nation the rich juices of a liberal patriotism.

### A GOOD WORD FOR PLUMAS COUNTY.

The faith of the people of Plumas in the value of the resources of the county has never wavered in times of great depression and we have seen such in the past, our people held steadily to the belief that a day would come when the attention of capitalists would be drawn to the immense value of our mines and forests, and that faith being well founded we have trusted in God, gone ahead and feared no danger. It would appear that the day of promise is now near the dawning; our resources are beginning to be known. The *Oroville Mercury* says:

Quartz mining in Plumas, like nearly all the counties in Northern California, has been kept in the back ground for the want of capital to properly prospect; but now that there is a large amount of idle means in San Francisco, we have no doubt that the owners of it will soon seek Plumas county as a base of operations. If one-quarter of the money that has been wasted in wildcat speculation in the silver mines of Nevada had been spent in developing quartz in Plumas county, there is no doubt that the output of gold would rival in value that of the silver yield of the whole State of Nevada. There are several well-paying mines now being worked in Indian Valley, and it would be idle to say that there is not just as good quartz in other parts of the county. The richness of the many river bars and the occasional finding

### ROUND ABOUT MOUNT SHASTA.

A correspondent of the *Sacramento Bee* writes as follows from the United States fishery on Cloud river:

I have just returned from a morning's journey through the mountains on the east of the McLeod [Cloud] river, and I believe that there is no country on the face of the earth where so many wonders and beauties are crowded into the same space of territory. Towering mountains, which reach an altitude of from 8,000 to 15,000 feet; beautiful valleys, overburdened with the richest foliage; sparkling streams, rushing down the mountain sides with many a beautiful cascade and teeming with piscatorial life; wonderful trees, whose lofty tops are lost in the dizzy heights above; myriads of birds of pleasing song and gorgeous plumage; here and there a stray bear standing out lonely upon some projecting rock and looking down upon you sleepily; numbers of graceful deer, with their little spotted fawns by their sides, now feeding quietly, now fleeing swiftly before you like the wind; now and then a coyote or fox crosses your path and is lost in the dense underbrush beyond, or it may be that you are startled by the sudden appearance of a large wildcat or lynx, as they swiftly jump from rock to rock in search of a tender rabbit or quail upon which to make their morning's meal; or you hold your Winchester rifle more firmly in hand as you notice the feline eyes of a California lion gazing upon you cautiously, as he swings his long and bushy tail from side to side, as much as to say, "Beware, or I will sprug." The next moment you enter a vale where the ground is carpeted with flowers of a thousand brilliant hues, and the skies above have no rival, and you find yourself upon one of the most beautifully flat bordering the river.

Trout fishing is very good here, but the salmon do not take the hook freely. Tourists are visiting the river daily, and since my last letter we have been honored by a visit from Senator Edmunds, Lieut. Arthur, of Vermont, and a Mr. Hodge, of San Francisco. They had very good luck in fishing and landing some very fine rainbow trout. A. P. and George Redding, of San Francisco, were also guests at the trout ponds a couple of days last week.

### SENSIBLE ADVICE.

To-day Tehama has a population of about 9,000, and if large land-owners, those who own the rich agricultural and horticultural land, would cut up their broad acres into 50, 80 and 160-acre tracts and sell to men with small means, it would not be five years till Tehama county would boast of a population of 20,000 and a tax roll of \$12,000,000 of property. Lands that are now rated at \$40 an acre would then be worth from \$75 to \$100 per acre. Where there is an occasional tenant's shanty and stable now, there would the small farm holdings be found, hundreds of fine farm houses, gardens and orchards, happy and contented families with all the evidences of happiness and prosperity surrounding them. We want a larger population, and we never can have it to the fullest extent till large farms are divided into small tracts, and sold to thrifty, industrious men who will improve and beautify their lands, increase their value and thereby add wealth to the county and State. Taxes would be less; more school houses and churches would spring up; manufactures would be built; our town would double its population and Tehama county stand in the front rank of the most rich and prosperous counties of the State.—*Red Bluff People's Cause*.

### LUMBER.

The lumber dealers of this city are doing a large business for this season of the year.



SCENE NEAR CYPRESS POINT, MONTEREY COUNTY.

And we are also here to send out our protest against pauperism, lawlessness and crime, and the message of our determination to maintain the purity and the integrity of the Caucasian race, to which we belong, on the heaving waves of two oceans, types of the restless aspiration of man for perfection in this world and happiness in the next.

### TRUE WORDS.

"There is no other way," says one of our exchanges, "of promoting and securing the general interest and prosperity of Californians than by settling small farms upon her rich lands, and building homes. When the time comes that pleasant farm houses shall dot our landscapes everywhere; when there are fewer estates stretching like empty empires over miles and miles of our best and most fertile soil; when more land is tilled, and new industries spring up, as they naturally will with the influx of population, then we shall begin to realize the vast possibilities of this section, and see the fulfillment of some of our best hopes." No truer words were ever spoken or published, and we regret that we are now unable to credit them to their proper source. Slowly, but surely, the sentiment that land monopoly and the maintenance of great ranches are an injury to the State, and delaying the development of its resources, is gaining ground among the people.—*Sacramento Bee*.

of rich rocks in the hill sides all goes to prove that quartz bearing gold, abounds throughout the entire county. Now that railroads are pushing their way into Plumas county her resources will soon be brought more prominently before the people, and the needed capital for development will not long be wanted, and when this comes a bright and prosperous future will be open to her.—*Greenville Bulletin*.

### CERRO GORDO MINES.

This camp, after several years of torpor, now bids fair with the coming of the railroad to resume something of its former activity. Of late very little work has been done on any of the mines and claims in the district. The Palma mine being the only one employing any force, though this force has not been large for the last four or five months. The burning of the company's tugboat on the lake last summer greatly interfered with more extended operations in this mine as well as others on the hill, as the stoppage of the Hawley mill prevented the excavation of ore; yet work on the Palma has gone on without stoppage, the principal development being through the "Hawley Tunnel," which has been pushed in to a distance of over four hundred feet, Mr. Wheeler having gone quietly to opening and developing the mine and making improvements generally, getting ready to occupy a full force when the railroad shall have reached the Hawley mill, and there is a certainty of a constant supply of wood, etc. A few weeks ago the greater part of the men were withdrawn and put to work on some of the lead mines owned by the Swensen Company.—*Yuba Independent*.



## THE BEST PLACE FOR MANUFACTURING.

We take the following article from a leading editorial in a recent issue of the *Daily Evening Post*, of this city:

San Francisco is entering upon an era of manufacturing. With the low rates of interest now prevailing, it is found that capital can be better employed in the production of material wealth than in the risks attendant upon mere speculation. The people of California, outside of their food supplies, have hitherto been largely dependent upon Eastern and European manufacturers for the comforts and appliances of civilized life. It took some time for California to effectually carry out a declaration of independence against the East in articles of food. And to meet the prejudices of certain people, in favor of Eastern goods, it is customary even now in San Francisco to sell some California products with an Eastern brand. This is true of hams, bacon and cheese. If people will persist in paying a few cents more per pound for these articles for the privilege of being humbugged, there is little blame to the merchant in making an honest penny in that direction.

Beyond all dispute, the city and county of San Francisco offers the best opening for the establishment of manufacturing enterprises over any other part of the State. Taxes are lower here than elsewhere in California. Sites can be had at reasonable rates. The city being the center of population, manufacturers are always certain of obtaining labor, because here is the place where the unemployed are wont to congregate. It would undoubtedly be better for the industrial classes if they would not crowd to the cities, but take their chances in the interior, where labor is always in demand in agricultural pursuits. But they prefer city life, and here they remain. Wages, as a rule, are therefore less in San Francisco than in interior cities. This is a factor, unfortunate though it may be, to the parties having labor to sell, which those engaged in manufacturing enterprises can not lose sight of.

Another point in favor of San Francisco as a manufacturing entrepot is its central situation. It has direct water or railroad transportation with every section of the Pacific Coast. It is the chief distributing and gathering point west of the Rocky mountains.

The growth of the iron trade in this city specially illustrates the facilities for manufacturing offered here. Fuel is cheaper than elsewhere in California. In certain classes of machines San Francisco competes with Chicago and St. Louis in the mining territories of Arizona and New Mexico, and in the mining districts of the Mexican Republic. New branches are constantly opening in the iron industry. San Francisco stoves will, before long, become as famous as San Francisco mining machinery. More than one firm is to-day largely engaged in their manufacture.

If any person will watch the number of applications which are made to the Supervisors for permission to erect steam engines and boilers, he will realize that the city is steadily growing as a manufacturing center. These embrace trades and businesses of all kinds. The manufacture of furniture has grown wonderfully within the last ten years. The agricultural implement makers are also gradually converging to San Francisco. It is to the interest of every property owner to encourage manufacturing industries in our midst, because every one established adds to the value of real estate.

## SONOMA COUNTY AT THE STATE FAIR.

The following is from the *Record-Union*: There was no exhibit in the Pavilion at the State fair more striking and suggestive than that made by Pomona Orange in behalf of Sonoma county. In a small space there was shown by samples the products of that fertile and prosperous county, from corn to millet, from wool to wheat, from fruits to woods, from roots to raisins, from nuts to oranges. Each sample was labeled with the product yield per acre, the name of the locality in which grown, the name of the producer, etc. Let us suppose that the 51 other counties of the State had made each an exhibit by sample of their products, what a splendid exposition of the resources of California the State Fair would be. The example of Sonoma should be followed next year by all the counties, and it may be easily done. The matter is one full of suggestion, aid, profit.

## TEHAMA COUNTY.

The following correspondence recently published in the *Red Bluff People's Cause*, regarding the inducements Tehama has to offer immigrants to settle there speaks for itself:

LEXINGTON (Maine), August 27, 1883.

ED. PEOPLE'S CAUSE: While reading some papers, I picked up one that came from your county called the *People's Cause*. I was somewhat pleased with the account of the enterprise you spoke of, and as there are some twenty people here who have some capital and business enterprise, and are talking strongly of going to your State to make homes, I would like to have you answer the following questions through your paper and send a copy of the same to me:

1st. What is the chief enterprise of your place?  
2d. What is farming land worth per acre near Red Bluff?

3d. What pay can Maine men get at different branches of business, say clerks, book-keepers, horsemen, teamsters, mechanics, etc.?

4th.—The production of the soil, climate, etc.? We want some place to stop. I take this means to inquire, hoping you will pardon my impertinence; and if you see fit to give said information it will be gratefully received.

Yours respectfully,

J. W. VARNEY.

225 Lisbon street, Lexington, Me.

The above letter was received last evening and we take great pleasure in answering Mr. Varney's questions, so far as they appear above.

The chief enterprise of Red Bluff is the manufacturing of doors, sash and window blinds, plan-

## FARM LAND.

In an asking of farm land a writer in the *San Luis Obispo Tribune* says:

First class land in San Jose valley is held at \$200 to \$500 per acre, and if well set in fruit from \$1,000 to \$1,500. This is much more than it would be worth for raising stock or dairying. It is not proposed to cultivate fruit exclusively, or even generally. We must have bread, butter and meat. What we do say is that the climate of California is adapted to the raising of fruit, so much so, that we can furnish fruit for half the United States, including Canada and the great wheat country of the northwest, taking such things in the way of trade as they will get for their wheat in the European or American markets. Instead of 48,000 acres of land in one farm with a few wretched huts upon it, where the sheep herder revels in luxury when he has a sack of flour, a piece of bacon and a bottle of his delightful whiskey, we want 500 pleasant homes, surrounded by fruit trees, and blessed with women and children; where the voice of song shall mingle with the hum of bees.

## LOS ANGELES COUNTY.

Los Angeles is a privileged county among the many privileged counties of California. Large areas of its land are eminently adapted to the growth of cereals, and its crops of wheat, barley, oats and rye are all large in area and liberal to the acre. It is one of, if not the best, corn county in the State, and some of its cornfields are equal to the best of those of the Western States. Its fruits it has no rival. In citrus fruits, oranges, lemons and

## THE PROSPERITY OF THE STATE.

There is a tide in the affairs of communities, as well as of individuals. Men pause away so soon, he has to take his tide at the flood to lead on to fortune. Not so the community. It is permanent, and its life knows many tides whose floods lead on to fortune.

Such a period is the present in the history of this State. Our own town and county has been enjoying a marked degree of prosperity for the past year, or more. Los Angeles has been the cynosure of all eyes but now the indications are that the whole State is visited by the impetus of growth and development. We shall look with no jaundiced eye of jealousy on this spread of the tidal wave of industrial growth to our sister cities and counties. It is best, every way, for us that this should go on. We therefore read with a great degree of satisfaction in our exchanges from all quarters of California, that the era of stagnation has passed out of sight and that a new era of improvement and cheerful growth is observable in all our borders. It is a matter of self-gratulation with us that the confidence and development which recently have marked our city and county have made their presence felt all over the State. The pen of rejoicing is heard "from Siskiyou to San Diego, from the Sierras to the sea." It is entering in San Francisco and her several suburbs in a marked degree. Building is going on at an extent not witnessed before for years. Holders of property, who have clung to their possessions and refused to baste a jot in their pretensions, were right. There is no speculation in this business. That was discounted all round the Bay five years ago. In the city of San Francisco and her environs only actual improvers and seekers of permanent investments can afford to buy. Such buyers are going in and putting their money into a place where they mean it shall stay. It would be hard to find a nook of the State where the hour is not marked by a feeling of great confidence, a spirit of enterprise and unmistakable signs of healthy growth.

This is more remarkable, if the season is considered. We are now at a period of the year usually marked by great quiet. This and the next two months are usually looked upon as a period of great activity among the farmers who are too busy with their crops to tunk a day ahead, and as a breathing spell among the mercantile communities who are awaiting the results of the reapers and threshers. Capital takes its vacation too, and waits until the dog days are passed before it casts itself vigorously into the channels of trade. This year an area of more than an average achievement looms up ahead, and there is a [general feeling that we can hardly take our summer rest. We all have a feeling that, if we do not move in

now and occupy the coigns of vantage which present themselves to the eye, some one may step in before us.

The developments of the coming winter, we feel justified in pointing to with confidence, as something of more phenomenal liveliness than even that which has characterized the immediate past, or than obtains in the present moment. From all present appearances, the State is beginning in her barley harvest, the reaping and in gathering of a series of crops which will cease only in the last grapes crushed at the wineries and the last nuts shaken from the trees by the change of trade winds of late November. These will hardly be cleaned up, when the first oranges of the next year's crop begin to press to market. This series of crops will be vastly the largest aggregate in bulk and value ever gathered from our fields. The worth will hardly be told in the sum of a round \$1,000,000. Wheat and barley with their products will bring into the State a very large amount. The wool clip is worth at least \$6,000,000. The wine crop will return us \$10,000,000. Fruit, green, dried, and canned will enrich us by upwards of \$5,000,000. There are to add to this, honey, hops, hiles, sheep, cheese, silver, precious and other metals, lumber, salmon, codfish, borax and a large list of minor importance which will easily swell the grand cash to our big figure above.—*Dunsmuir Messenger*.

## RICH BOULDER.

A very rich quartz boulder was found in the Nevada claims at Gibbonville, a few days since. The boulder was found lying close to the surface, and weighed 125 pounds. It is estimated to contain over two thousand dollars.—*Dunsmuir Messenger*.



SCENE IN THE EIGHTEEN-MILE DRIVE, NEAR HOTEL DEL MONTE.

ing and sawing lumber for business purposes and exporting to other parts of the State and to foreign countries. About 135 men and boys are employed in the factory.

Farming land near this place can be bought from \$5 to \$60 per acre, according to location and quality. Government lands can be pre-empted and homesteaded within railroad limits for \$2.50 per acre. Railroad lands can be bought for 50 cents to \$20 per acre, according to quality and location; the fifty cent lands are used for grazing and much of it is well timbered.

Wages for ordinary laboring men range from \$1 to \$2.50 per day; mechanics get from \$2.50 to \$3.50 per day, and extra good mechanics get as high as \$5 per day; horsemen and teamster's wages range from \$1.50 to \$3 a day; clerks and book-keepers get from \$60 to \$125 per month.

The productions of the soil are wheat, barley, oats, corn, rye, fruits of all kinds (including some tropical), grapes, vegetables of all kinds, melons, etc.; in fact anything that can be raised in any part of California. Wheat and wool are the staples.

The climate is as good as any on the Pacific slope, the thermometer seldom falling below zero and rising to an average of about 94 degrees in the summer.

In conclusion we will say that there are over 800,000 acres of vacant land in Tehama county, a great deal of which will produce as fine grapes as any in the State, while there are still a considerable quantity of land that will produce good grain. Greater inducements are now held out to immigrants who will engage in farming than to any other class.

limes it excels Florida, and in apricots, peaches, pears, and even apples, and some of the smaller fruits, it runs even with any other part of California. Los Angeles more than holds its own as a dairy county. It is a great sheep county still, though its wool product is becoming less and less each year, because the land is becoming too valuable to be devoted to raising wool and mutton. It has a number of excellent mining prospects, and what is better still, a number of mines which are making their owners rich. Even its sage-brush deserts produce honey and wax in abundance, and its naked hills and gloomiest canyons are immense storehouses of petroleum, and the very mountains, lifting their precipitous sides from 7,000 to 11,000 feet into the heavens, are great reservoirs of water, containing a perennial store of water sufficient to irrigate and fertilize thousands upon thousands of acres of sterile, gravelly, sandy desert, now bearing only cactus and other vegetable rubbish, and make of them the most productive and profitable fruit orchards in the world. Los Angeles is a county so favored that while its cultivatable lands are amongst the richest in the world, its wildest wastes are directly or indirectly productive of wealth.—*Cor. S. F. Merchant*.

## WALNUTS.

There is considerable inquiry of late, on the part of wholesale dealers in San Francisco, in regard to the coming walnut crop. The crop at Downey and Los Nietos is estimated at 150 tons. The crop in this valley will also be large, and the nuts will be of better size than usual. Producers are asking 8 1/2 cents per pound, which is thought, by the dealers, to be rather high.—*Santa Ana Standard*.



## VOLCANO MINING ITEMS.

A very promising gold quartz mine has been recently developed by Mr. Canvin near Volcano.

Mr. Haller near the old Markby, sunk a shaft 100 feet in depth on a vein that in earlier days yielded excellent results. All the low ground in the lower portion of the shaft shows high grade ore some two feet broad. The miner is seeking the assistance to plant his machinery there to be used for the purpose of sinking 100 ft. deeper.

The twenty stamps of the Duyns mill are running steadily. The slopes between the 400 and 500 ft. levels are supplying the mill with ore of apparently inexhaustible quantities as productive as usual.

It is reported that a gravel mine near the North fork of the Mokelumne river was sold a few days ago to San Francisco parties. Work in the deepest shaft (320 ft.) of the mine shows some three miles above Volcano, was stopped last Thursday. Since last November the mine has been under the satisfactory management of Mr. Stetson, an old quartz miner identified with the mining interests of Calaveras and Amador for years. The heavy flow of water encountered in the 300 ft. level is stated to be the principal cause of deranging operations there for the present. The Company paid all demands promptly and continues working a few men near the surface.

Mr. Much is developing large quantities of ore on the Sorocco mine.

The Volcano Tunnel Co. are now realizing expectations of dividends, under the prosperous supervision of Supt. Douthett, a practical hydraulic miner. Although the grade of the large tube in tunnel is insufficient and the requisite supply of water has been very limited, a large space of ground has been swept off to the same grade. The clean-up will be large. The gravel remaining below the tube grade is all new, rich, and estimated to be from 20 to 50 ft. in depth. It is intended to hoist this gravel into the tube during the summer, sufficient water being at command then for that purpose.—*Amador Dispatch.*

## SAN FERNANDO TO ETIWANDA.

Our neighbor and friend of the *Pomona Times* took a run through the valley last week and sums it up in this wise:

At Ontario we found improvements going on at a lively rate. The new hotel building is rapidly approaching completion, and will be a handsome and commodious structure. Quite a number of new residences are being built. Vineyards and orchards have been planted, pipe-laying is being pushed ahead, and the determination to make this a model settlement gives promise of being successfully carried out. At Cucamongo we found evidence of substantial progress on every hand. The country is being settled up, homes built, and preparations made for tree and vine planting. The Iowa tract is being rapidly settled and improvements are the order of the day on every hand. A broad avenue has been graded from Cucamongo to the mountains, a distance of six miles, and along this avenue a twelve-inch pipe is laid, conveying water from Cucamongo canyon to the settlements. At the upper corner of each twenty-acre tract the water is delivered through hydrants, for irrigation and domestic purposes. This will, no doubt, be a prosperous locality. A drive through the valley lying along the base of the Sierra Madre range is sufficient to convince any one of the great future available in this immense territory. It has an empire, and from San Francisco to Etiwanda there is scarcely an acre that is not well adapted to the growth of either grain or fruit. The day is not far distant when this immense domain will be densely populated and dotted everywhere with vineyards, orchards and happy prosperous homes. What a population it will contain!—*Riverside Press.*

## A VALUABLE DISCOVERY.

Some ten years ago the owner of a tract of land lying back of the State University at Berkeley took a sample of stone from it to a mineralogist in San Francisco, who, upon inspection, pronounced it "pozzolana," a name derived from an Italian city where a rich rock is found of which a very strong and valuable hydraulic cement is made. Hon. John S. Hittell, the well known California author and scientific inquirer, now in Europe, has lately forwarded samples of the pozzolana to Prof. Hanks, the State Mineralogist, from Italy, and on the very day they were received, the owner of the land near the State University, who had so long ago furnished the rock samples found to be pozzolana, called at the Mining Bureau with fresh samples which were subjected to analysis and test, proving their identity with the Italian mineral. Mr. Hanks thinks no discovery has been made for years in the State of comparable value. It will, he says, prove a substitute for Portland cement at one-fourth its cost, and for many uses be superior to it. In this connection, a building may be erected down hill even, he asserts, without a possibility of breaking apart than would a burglar-proof iron safe, and equally as strong as iron would be sewers and water pipes made of this inexpensive material.—*Contra Costa Gazette.*

## THE VALUE OF COLUSA COUNTY LANDS.

The Colusa Sun thinks that the people of its county do not know or appreciate the value of their land. It says:

We went over the river in R. Jones' farm one day this week, and took a look at his little place. He has in only 151 acres, and he fancied that it was too small a farm. There we found apricot trees five years old, set out in four feet apart, with the branches interlocked across the rows. They were headed down, bending every branch with the weight of fruit, so that he might say that the whole area was literally covered with fruit. He has in this orchard; pears, apples, plums and prunes, all doing equally well. The orchard of this age is small, but he set out last year apricots and prunes as well as about twelve hundred trees in all. The growth of the young trees had been as good as can be shown in the State, and many of them were actually bending to the ground with the weight of the young fruit. Trees on this land will yield fruit to the value of at least a dollar a tree, at three years old. Mr. Jones has delayed planting more fruit, because of the market, but he will, this winter, put out a large orchard. From his experience he thinks the apricot and the German prune best adapted to his land, and he will plant them only. Mr. Jones has quite a lot of his land rented to Chiunam, at \$16 an acre per annum, and is offered \$20 for more of it. In England land is valued by its rental for thirty years; in the Eastern States land is worth twenty-five times its rental, and in California it ought to be worth twenty times its rental. The whole of Mr. Jones' land is worth \$330 an acre. It is true it will not sell for that, and simply because of this county have not learned the value of land as they have in other portions of the State. There are many such tracts of land along the river lying almost unused, but all because our people have not waked up to a realization of the true value of such land. As we have before remarked, if the land from L. E. Monillon's to Butte slough, on the east side of the river, that will produce just as much as Mr. Jones' land, was put in the crops best adapted to it, there could be employment furnished to 5,000 laborers. Let any one look at Mr. Jones' orchard, with trees so far apart, absolutely covering the ground in five years. The time is near at hand when we will see a great change in the face of the country, and such pioneers as Mr. Jones in the business, will reap a rich reward.

## A STONE FOREST IN THE BED OF LAKE TAHOE.

For some years past there has been a bank in Lake Tahoe, which, in clear weather, has gradually been taken for muss formation. It lies at the right of the steamer's course between Tahoe City and the Tallac House, about two miles beyond Idlewild. It looked as if a lot of trees had sunk to the bottom of the lake and that moss and slime had collected there until the whole presented a very unsuspicious appearance about 50 feet below the surface. During the past few weeks the moss and debris have disappeared, and now, when the water is clear, a forest of pine trees can be plainly seen with every limb and twig perfect. Some fishermen went out there in a boat and lowering some grappling irons secured several splendid pieces of the petrification. One is a pine branch about three feet long, which, when held a few feet from the eye, has the exact appearance of a pine branch just taken from a living tree and apparently fresh and green, the brittleness and weight distinguishing it from the freshly cut branch. The specimens brought to Mr. Kinney's were speedily disposed of to tourists. The largest was purchased by Henry Townsend, of San Francisco, for \$25. This is said to be the first thing of the kind ever found in the lake. The forest occupies about two acres, and seems like a forest just immersed, except that its stony branches are forever still, and tall weeds and vines which cluster about the trunks of the giant trees are motionless as the rocks. No wind ever stirs this strange verdure, and the birds which once sang in the branches centuries ago have given way to fish which swim through the forest by thousands.—*Garson Appeal.*

## A LARGE MINING SCHEME.

The Oroville Mercury says: Capitalists are at present projecting a scheme, which, if carried into effect, will make Oroville one of the greatest mining centers in the world. This project is neither more or less than the organization of a company who propose to mine Carpenter's Flat to the head rock. It is a well known fact that the entire flat is rich mining ground, but as yet no adequate method has been employed to get rid of the water, which is encountered a short distance from the surface. The new company propose to work it by means similar to those in operation in the silver mines of the Comstock lode. Powerful pumps are to be placed at different points and it is believed that all the water run thus be got rid of. The working of this vast gold field will necessitate the employment of thousands of men. We are not at liberty to divulge the names of the projectors, but can state that they are very wealthy, and are well insured that their plans will be put in operation at no distant day.

## RAISINS AND GRAPES.

The following excellent article is from the agricultural department of the *Weekly Call*:

So long as the planting of new vineyards on the this Coast is carried on with swift energy each winter, and the crops are each year increasing, whatever helps the production of a high-class raisin is of interest to many persons. It will not, at the present rate of progress, be long until the raisin culture will be an important industry in at least twenty out of the 52 counties of California, and will probably gain a foothold in twenty more. Each step taken and each experiment made is of importance, and should be put on a record. The soil is, in places, all that can be desired for this purpose, and for more than ten years earnest and intelligent horticulturists have been making experiments with grapes. But the marketable raisins as yet produced are certainly capable of improvement. And it is most gratifying to perceive the commonsense way in which the makers are recognizing this fact.

There was an able report on raisins made by the appropriate committee of the recent Los Angeles fair, in which they urge a frequent comparison so as to develop this interest into greater commercial importance. They say that the essentials of good raisins are as follows:

Size of berry which should be large and uniform; bloom—bright, rich, unbroken; color blueish and clear, never red, which indicates incipient decomposition; skin—thin, delicate but strong; pulp—juicy, uniform and clearing freely from the skin, not pasty; flavor—rich, vinous, dry, aromatic, delicate, seeds—few, small, hard; stem of berry—firm, strong, adherent to main stalk; bunch—large, full, compact, adherent; packing—layers only one bunch deep, each bunch isolated as far as possible; boxes—uniform in style and of utmost external neatness; compactness—every box should be absolutely full, after proper pressure, and as few stalks as possible to sight.

They then call attention to the following points, in which growers often fail, causing themselves loss, and injuring the good fame of California raisins:

Boxes not full, always detracts from commercial value; stems or stalks too large and allowed to be too prominent after packing; boxes too full, so that the pressure of the cover has broken the skin of the berries; insufficient care in "clipping out" small and abraded berries previous to packing.

## COUNTRY LANDS.

A writer in the *Bulletin*, of this city, whose opportunities are good for judging, says:

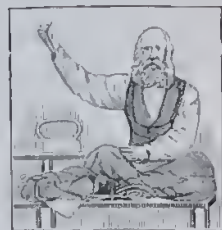
There is no gaining the fact that the inquiry for country land is at the moment quite unprecedented. Every day there are more or less arrivals in this city of representatives of large or small estates who propose to come to the Pacific Slope. Lands adapted for orchard and vineyards appear to be most in favor, and moderate improvements are in almost all cases especially desired. These people have means, but the asking rates are frequently a barrier to immediate investments. Improved lands, near the railroad, are chimered to be held at fancy prices, while more distant properties that six months ago could be bought at a small figure have been marked up to values that practically check negotiations. It will take but little time, however, for those matters to adjust themselves. The law of supply and demand is a good regulator, and doubtless in this case will be equal to all emergencies. We have about 5,000,000 acres of Government land, which, though not directly accessible, is said to be largely of as good productive quality as any that can be found in the State. Then the railroad lands are coming into prominent notice, being offered as low down as \$2.50 per acre, with easy conditions. Of course in Napa valley, Santa Clara, Santa Cruz, Los Angeles, Fresno and other settled districts, land is probably worth all that is asked, when comparison with the yield and financial returns is made. Norcomers, however, generally want cheap lands, and this class will be more quickly settled, and find more prompt sale than higher-priced offerings.

The inquiry for interior parcels has stirred up nearly all our local agents, and there is hardly a firm of prominence that is not arranging for a country department in connection with his city trade.

## NEW VINES.

The present year will prove to be a golden one for our viticulturists and viniculturists. The vines never looked better than they do now, and the common grape crop will be one of unprecedented volume. Nor is that the best of the immediate outlook. Great areas of new vines have been set out in this city and county during the past season, and the rains have come just in that order which would be most desired. They are thirty to one hundred percent, more than one percent, of the outcrop filling to take root. Los Angeles county is putting herself in shape to give rapidly to the front as a wine and raisin grape producer. Within two years, at the present rate of progress, we shall compare with Napa and Sonoma counties to take our dust.—*Los Angeles Herald.*

## NICOLL, The Tailor



JUST RECEIVED

A Fine Assortment of Foreign and Domestic  
Woolens for this Season.

CALL AND SEE OUR NEW PATTERNS!

Suits to order, from..... \$20 00  
Pants to order, from..... 5 00  
Overcoats to order, from..... 20 00

MEN'S, BOYS' AND CHILDREN'S

SUITS AND OVERCOATS.

Manufactured by Ourselves, after the Most  
Approved and Latest Styles, at  
Short Notice.

WELL CUT, WELL MADE, STYLISH AND  
CHEAP.

You will do well to inspect before  
purchasing elsewhere.

CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

NICOLL, The Tailor,

PHILAN'S BUILDING,

816 & 818 Market Street,  
SAN FRANCISCO.

BRANCH STORES IN ALL PRINCIPAL CITIES

W. M. BRANDON & CO.

311 Kearny Street, Telephone No. 231, 3 bells. Branch,  
208 E. Filmore Street, Telephone No. 1, 677.

SAN FRANCISCO.

REAL ESTATE AND FARMING LANDS BROUGHT  
to sell and exchanged on commission and private  
account. Mortgages, fire and marine insurance, and  
with water rights especially. Houses rented and rents  
collected. Money loaned.

**\$3,000.** 127 ACRES BOLLING AND ILL  
land near Napa. Saps and springs. 10  
acres in vines, 15 acres more ready to plant, the acre  
good, balance tillable; house and barn, and  
very fine spring of water. W. M. BRANDON & CO.,  
311 Kearny street.

**\$2,500.** 71 ACRES IN SONOMA COUNTY. 2  
miles from depot and postoffice and  
half a mile from school. 34 acres is perfectly level,  
balance gently rolling; good soil, particularly adapted  
for fruit; 2 acres home vineyard and orchard, and fine  
climate; 60 acres of trout cut and ready for hauling;  
plenty of standing timber, which will more than pay  
for the place; common house five rooms; barn and out-  
house, 2 cows, 4 good milk horses, with their harness,  
1 four horse wagon, 1 two horse wagon, 1 spring wagon,  
plow, cultivator, harrow. W. M. BRANDON & CO.,  
311 Kearny street.

**20 ACRES AND UPWARDS—1000 ACRES FINEST**  
fruit, grape or farming lands in the State; all  
rich, level land, and plowed ready for planting, and  
sell on small yearly installments; cheap land and con-  
venient for transportation; best opportunity ever offered  
for a poor man to obtain a home; will suit all classes,  
plenty of rain and lovely climate. W. M. BRANDON  
& CO., 311 Kearny street.

**\$30,000.** 1,000 ACRES ON SONOMA  
county, 20 miles from the town of  
Sonoma; 200 acres under cultivation, as follows: 26  
acres in full bearing grape vines, all healthy and vigor-  
ous; 164 young grape vines, one and two years old;  
15 to 20 acres in full bearing orchard, consisting of  
apples, peaches, pears, plums, apricots, etc.; 25 acres  
in grain; 400 acres more of the land can be cleared for  
grapes and fruit. On the balance of the land there is  
good pasture and between 7,000 and 10,000 cords of  
wood. Hires well watered by running streams. Terms  
easy. W. M. BRANDON & CO., 311 Kearny street.

**\$12,000.** 105 ACRES FINE FRUIT LAND  
in the Vacaville warm fruit belt  
all fenced 115 acres under cultivation, balance pasture  
and timber, good orchard, 3500 trees, choice fruits, 24  
acres vineyard, fine varieties of table grapes, present  
crop worth \$300, one-half of which is included in the  
price, payable in cash at commission merchants, at  
San Francisco, all necessary farming tools, 8 tons hay,  
100 fruit boxes, one good fruit wagon, horse, harness,  
fruit-packing house, out house, latrine, two good wells  
and several springs of fine water.

**\$20,000.** 320 ACRES LEVEL LAND IN  
Sonoma County, California, all fenced  
and highly cultivated, two dwelling houses, one hard  
bushel, 6 rooms; water in house, stockyards and  
garage, two wells, tanks and windmills; 1,500 vines,  
foreign varieties; good orchard.

W. M. BRANDON & CO.,  
311 Kearny Street.



## A MINING TOWN.

Grass Valley has always been distinguished for its many rich quartz mines, and it will retain that distinction for hundreds of years to come. This place never had any very big gravel mines, although there has been much gold taken from gravel of this district. Compared with other parts of the mountains, however, Grass Valley has never been what might be called a place for gravel mining. Some few of the people here call Grass Valley dull at present, but they have not been out among the mines where men are drilling and sledging among the quartz ledges. In the mines life and energy are seen, and life and energy in the mines will be felt advantageously on the business and prosperity of the town. Now and then a growler may be found here who will say that the town of Grass Valley is going down hill and that the place is surely in a moribund condition. The same kind of a growler was here in 1849, and every year since his coming he has been foretelling that evil days and total destruction are here or are very close by. Yet the town has thrived and grown and spread and has been the abiding place of average human happiness all the while that the growling has been going on.—*Grass Valley Tidings*.

## INCREASING IN VALUE.

The following from the Stanislaus *Wheat Grower* published at Oakdale shows how rapidly land is appreciating in value:

Last Tuesday J. L. Fields sold the William Browning ranch, containing 192 acres, to a Mr. Campbell of San Joaquin county for \$6,500—an advance of \$2,000 on the price paid for the same property last fall. The farm is a half hour's drive west from Oakdale.

## CALIFORNIA KNIGHTS.

The Chicago *Inter-Ocean*, of Sept. 2d, contains the following regarding the Conclave:

The returning pilgrims from the Pacific Coast are varying the trip by coming back over different routes. Those who went to San Francisco via Chicago, are now returning via St. Louis, and those who went through that city are now passing through Chicago. All the Knights are united in their encomiums of San Francisco and their reception in that city. It seems that every Commandery in California had a headquarter in San Francisco, and no Knight could move about the city to enter a shop, store or place of interest, but what there was a committee of one always ready to assist him in supplying his wants, and no money would be accepted from the pilgrim. It was truly a case of freedom of the city, and not one of the pilgrim Knights will ever forget the hospital treatment he received there. There were only about 6,000 Templars in San Francisco this Conclave, and they could be taken care of in a princely manner. In Chicago there were 50,000 Knights, and a dozen San Franciscans could not hope to handle such a gathering any better than did Chicago. Still the pilgrims this year are overjoyed regarding the California Conclave.

## RICH MINES.

The *Tribune* makes the following mention of some of the mines in the immediate neighborhood of Forest City, Sierra County:

The extension in the South Fork ground is showing great richness. If the deposit is as great as it promises the yield of gold must be immense within the next few years. The San Margarita mine is paying handsomely. The Rainbow quartz mine is turning out to be very rich. William Hanley brought into Forest City last week 890 ounces of gold taken from a hand mortar, as the result of the crushing of a few hundred pounds of rock.

## OUR OIL INTEREST.

The Santa Barbara *Press* thus speaks of the oil interests of our State and coast:

Two vessels are now fitting up with iron tanks in their holds to convey petroleum in bulk from San Buenaventura to San Francisco. An immense iron tank has been constructed near the wharf at San Buenaventura, and a pipe line is nearly completed from this tank to Santa Paula canyon, near the rancho of San Cayetano, where a well already produces some 25 barrels of oil per day. The average of all the wells sunk in the Pennsylvania oil region is only about ten barrels a day. Some, of course, give hundreds of barrels, but these are rare. We speak of the average of the production, taking all the wells together. It is known that the petroleum field on this coast is many times as large as the Pennsylvania field, and there is no reason why it should not be developed and made to yield all the oil that is needed on this coast, and to supply the Sandwich Islands, Mexico, and the west coast of South America. Local capitalists have not been bold enough to invest any considerable amount in sinking wells in the petroleum belt, but Eastern men, with more enterprise, experience and skill have recently turned their attention to these promising oil regions, and are meeting with merited success. Twenty oil-borers, from Pennsylvania, have just gone into Ventura county, and 30 more are on the way thither. Ample funds are ready for oil investment by Eastern people, who have made locations of oil lands under the United States laws. One company has bought, for \$100,000, the oil right in the hands of the Ex-Mission of San Buenaventura, and will thoroughly develop it. The benefits which will accrue to this southern portion of the State from the development of its wonderful petroleum resources, are manifold and enormous. They must far exceed the value of all the gold production in the northern portion of the State, the chief manufactures of the coast, and also lead to the growth of foreign commerce.

We clip from the San Francisco *Bulletin* of August 16th a telegram from New York, showing that our belt is receiving some attention at the East:

New York, August 15.—A *Times* special from Bradford, Pa., says: A well known Pennsylvania oil operator recently returned from the petroleum districts of the Pacific Coast, gives a glowing account of the nature and profits of the operations there. He says the finding of oil in California districts is as certain as it was in the Bradford field. The drill always finds deposits, and no failure, at least in three of the districts, has yet resulted. It costs seven thousand dollars to put down a California oil well after the tools are on the ground, or twice as much as a Pennsylvania well; but after it is down and flowing or pumping, the California well is a much more valuable piece of property than the other.

## STEEL FROM CRUDE ORE.

We have on our table the first piece of steel ever manufactured in San Diego. Some day in the future it may be a very interesting curiosity. W. Bouldin, the inventor of the process of making steel directly from iron ore, yesterday gave a test of his method of working at the blacksmith shop just below Armory Hall. A large number of business men and others interested in the proposed establishment of steel works in San Diego were present. The test was eminently satisfactory. The crude ore was broken up in a mortar and placed in crucibles with a certain proportion of flux, and subjected to the heat of a furnace. The first crucible withdrawn was found to be broken, there was sufficient melted steel to show the certainty of the process, the fragment in our possession being taken from it. The next crucible gave a solid ingot of steel weighing somewhat over ten ounces. This was produced from one pound of ore and six ounces of flux, after a little over two hours in the small experimental furnace. In a proper furnace the same time required to convert ore into steel is less than one hour. All present were thoroughly satisfied with the test. Mr. Bouldin says that fine steel can be manufactured by his process at one cent a pound. It is proposed to form a joint stock company to erect works, with a working capital, to begin with, of \$30,000. We believe, from the remarks of gentlemen who have been investigating this subject that the company will now be formed with little delay.—*San Diego Union*.

## NO CYCLONES IN CALIFORNIA.

The Western States (as they are called) are no longer good places to settle in, but are good places to leave. Cyclones are as destructive as earthquakes and quite as appalling, and no person of judgment will take up his abode or linger where cyclones are prevalent. A fire or a flood can be evaded by flight, but an earthquake or a cyclone comes without notice and so suddenly that flight is impossible and no man can tell what course either will take. Immigrants, whether from Europe or the East, will soon cease to settle in a region subject to cyclones and those there will gradually move to safer quarters. Already we know of persons who for this reason moved from mid-continent to California and more will follow. Judge I. N. Hoag, now in Chicago as Emigrant Agent for the Central Pacific Railroad, might had his advertisement "No Cyclones in California." These cyclones but confirm the theory of William Frank Stewart, preached in Sacramento 20 years ago, that earthquakes, save at such places as Vesuvius or Mount Loa or Hecla, are not caused by internal fires but by electricity. "And," he said, "when the overland railway shall be completed I predict that there will be but few if any earthquakes in San Francisco or California and that they will be light, because the rails will conduct the electricity to mid-continent where it will become a destructive element causing tornadoes and great storms." That prediction has come to pass, both as to the cessation of earthquakes on this coast and the destructive electrical storms in mid-continent. And yet, so far as we know, none of our modern scientists have attempted to account for these cyclones, on Stewart's or any other theory. The fact, however, is prominent; and the West will come farther West to escape these storms, while immigration on the move will not stop there as of yore, hence California will, on this account, be sooner populated than it otherwise would be.—*Sacramento Bee*.

## A TEN ACRE FARM.

J. Y. Dillon has recently given the *Yolo Mail* the result of his industrial operations for six years on ten acres of land, which that journal reports as follows:

He began upon it six years ago by planting five acres to the Muscatel grape. He now has seven acres, the last two acres being lately planted. He also has one acre planted to prunes, nectarines and peaches. From his five acres last year his gross returns were \$1,200. He planted last year three quarters of an acre to beets, which yielded him thirty-five tons. With these and a little bran or shorts he kept a span of horses and two cows seven months, besides which he sold \$30 worth of beets. One of his cows yields him now from ten to eleven pounds of butter per week, besides the milk the family (consisting of his wife and one child) uses. When the cow is fresh he makes from her fourteen pounds of butter per week. Along his fence he planted twenty walnut trees, now six years old, which have borne fruit the last two years. From the wood cut from these trees this year in the trimming, he made little over three cords of stove wood. Gum trees planted six years ago, and some of them twelve inches in diameter, will make, when cut into wood, from one quarter to one half a cord of wood per tree. Mr. D. says, in the condition in which he now has his fruits and vines, he can make a living for himself and family and lay by from \$800 to \$1,000 annually.

## COMPLIMENTS TO CALIFORNIA.

The New York *Tribune* of recent date says: Henry Grozjean, the French Commissioner of Agriculture to the United States, who has been here for two years, sails for home Wednesday next. He prophesies a great future for California wine, and thinks we cheat ourselves by using foreign labels on our good wines. He yesterday visited Castle Garden and critically examined the arrangements for receiving the number of immigrants now arriving at the government landing. He believed that the French immigrants would not find it agreeable to settle in Mantoloking, Minnesota and the Northwestern States all of which he conceived unfit for French settlers. He thought the northern climate of this country was somewhat like that of Normandy, in France, while California is the State which, he believed, would admirably suit Frenchmen. It was more like Marseilles.

## MUTUAL RESERVE FUND LIFE ASSOCIATION,

55 Liberty Street, New York.

INCORPORATED UNDER THE LAWS OF THE STATE OF NEW YORK.

EDWARD B. HARPER, President. T. A. N. Secretary. CHARLES R. BISSELL, Treasurer. O. D. BALDWIN, President Fourth National Bank, New York, Auditor of Death Claims and Reserve Fund. The Fourth National Bank has a paid-up capital of \$200,000; \$20,000,000 daily balance; \$30,000,000 passes through the President's hands each day. CENTRAL TRUST COMPANY, of New York—wholly assets of \$12,000,000—Trustees of Reserve Fund Account.

\$10,000 LIFE INSURANCE FOR \$50. \$5,000 FOR \$30.

## OUR PILLARS OF STRENGTH.

First—Graded assessments, so that the young and old will pay their exact proportion, and only as the same shall be required.  
Second—A Reserve Fund, so that the permanency of the Association is guaranteed.  
Third—A careful Medical Examination, so that only the healthy can become members, thus insuring a low mortality.  
Fourth—The Tontine System, so that old members will reach a point where no further payments will be required. New members will endeavor to reach this point by being persistent in their payments.  
Fifth—By placing the Trust Fund beyond the control of the Officers and Directors, so that no part of the same can be used in paying exorbitant salaries or expenses, or misappropriated or corruptly handled by them.  
Sixth—An open Ledger, so that the affairs of the Association may always be known to its members.  
Seventh—The limitation of the expenses of the Association to the amount received from the admission fees and annual dues.  
No association presenting these combined features has ever failed in the history of insurance. No plan of insurance ever presented to the public has such a universal hold on the hearts of the people, and has been so unanimously accepted as a sound basis for permanent protection to the insured, as that adopted and presented to the public by this Association.

THE ASSESSMENT FOR 1882, AT AGE 35, WAS ONLY \$3.10 FOR EACH \$1,000.

This Association is today composed of over fifteen thousand business men, such as Bankers, Merchants, Lawyers, Editors, Professors of our Colleges, Clergymen, Manufacturers, United States and State Senators, Chiefs of our Government Departments, and others, all united together for the protection of their families, upon a common sense plan, each member contributing the exact amount required for the protection afforded.

Our business in force at the beginning of the year was \$7,661,000. At the end of the year it was \$75,270,250. The assessments for death claim per year, for the past two years, have been, at the average of 35, but \$3.10 per thousands dollars insurance, while all of our death claims have been paid with when due; while, at the same age, the usual rates under the old system are \$20.50 per year, or \$34 for the two years, on each one thousand dollars of insurance.

## APPOINTMENT OF AUDITOR.

Mr. O. Baldwin, the highly esteemed President of the Fourth National Bank of New York City, a bank possessing assets exceeding \$20,000,000, has become our Auditor of the Death Claims, Reserve Fund and Assessment Accounts. Within the past four months he has caused two examinations to be made into our accounts. In each case his examination, as per his report, has proved eminently satisfactory.

## TRUST COMPANY AS TRUSTEE.

Your Board of Directors within the year have also selected the Central Trust Company, of this city, to act as Trustee of our Reserve Fund, of which Mr. Henry F. Spaulding is President, and the Hon. J. P. Olcott, late Comptroller of the State of New York, is the Vice President. The contract made with the Trust Company places the funds of the Reserve Fund beyond the control of the management of this Association, yet retaining a controlling supervision to prevent peculation from other sources. The Central Trust Company has assets capital and surplus of \$1,300,000, with assets exceeding \$17,000,000; thus all conceivable safeguards have been thrown around the affairs of this Association.

## OPINIONS OF ACTUARIES.

Within the past year we have received written opinions from the great Actuaries of our country, Hon. Elizar Wright and Mr. Sheppard Homans, as well as the opinions of many other equally reliable Actuaries. In every case the report has been that our system is correct, and our Association will be a permanent and useful institution.

## TWO SYSTEMS ANALYZED.

The fact is, there are two systems of Life Insurance in existence to-day. The one is known as the Level Premium System; the other is known as the Assessment System.

## ASSESSMENT SYSTEM.

The Assessment System requires the members to provide for their losses as they occur. It admits of the insured being the custodian of their own money until it is absolutely needed, and its only weak point, as developed by the experience of the past, is a lack of co-insurances, which has been fully provided against under the Reserve Fund system of this Association.

## LEVEL PREMIUM SYSTEM.

The Level Premium System requires the members to provide for the losses before they occur. To determine the proper amount to be collected in advance, they have adopted what is known as the American Experience Mortality Table. The correctness of this table is not a matter of doubt. That it, with the interest on the excess of payments, are the only elements to be considered in making up the cost of life insurance, is a disputed question, to say the least.

Our rates are based on actual and not on assumed mortality, as is the case with the old life companies, which require in advance four times the actual cost of insurance.

BEST FIRST-CLASS MEN WANTED IN EVERY TOWN ON THE COAST AS AGENTS.

Call on or address

C. M. OAKLEY,

General Agent Mutual Reserve Fund Life Association for the Pacific Coast,  
314 MONTGOMERY STREET, SAN FRANCISCO.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH.

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 330 Sansone St., Halleck Building.

ISSUED MONTHLY

Terms.....\$2 per Annum.

SAN FRANCISCO.....OCTOBER, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

**First Page.**—Butte County.—Olive Culture.—Rich Mines.  
**Second Page.**—A Buller Ranch 7,300 Feet Above the Level of the Sea.—Santa Clara Valley.—An Elaqueon Passage.—A Good Food for Finnas County.—Round About Mt. Shasta.  
**Third Page.**—The Best Place For Manufacturing.—The Prosperity of the State.—Tehama County.  
**Fourth Page.**—Volcano Mining Hints.—San Fernando de Tolima.—A Valuable Discovery.—The Value of Colusa County Lands.—A Stone Deposit in the Bed of Lake Tahoe.—Raisin and Grapes.—County Lands.  
**Fifth Page.**—The States Prosperity.—Petroleum On Top.  
**Sixth Page.**—Ripe Fruit Trade With The East.—No Danger Of Over Production.—About The Mines.—Wool And Wool Factories.  
**Seventh Page.**—A Mining Town.—California English.—Our Oil Interest.—Steel from Gravel Ore.—No Cyclone In California.—A Teo Aro Farm.  
**Eighth Page.**—Available Lands For Men Of Means.—Immigration.—The Mechanics' Fair.—The Pacific Saw Manufacturing Company.—Purchasing And Commission Agency.  
**Ninth Page.**—A Word Or Two About California.—Isolated Sections.—California Fruit.—What They Say About It.—Promp Settlement.—A Grand Invention.—A Big Strike.  
**Tenth Page.**—W. T. Garratt.—The Gumling Viilage.  
**Eleventh Page.**—California Iron.—Volcano County.  
**Twelfth Page.**—Santa Barbara's Foothills.  
**Thirteenth Page.**—Just What They Should Do.—Improvements In Sherry Making.—Calico Mining Notes.—Auriferous Gravel.  
**Fourteenth Page.**—Mining In Southern California.—Sierra County.—The Title of Immigration.—A Great Enterprise In San Bernardino.—Viticulture In The Santa Clara Valley.  
**Fifteenth Page.**—The Seedless Sultan Grapes.—Manufacturing In San Bernardino.—Small Farms.  
**Sixteenth Page.**—Inviting To New House.—Grape Growing.—An Immense Irrigating Canal.

## AVAILABLE LANDS FOR MEN OF SMALL MEANS.

If those people, who, after arriving in the State, feel disappointed and leave it for Oregon, Washington Territory and other localities, in consequence of not being able to find suitable places where they can build up homes, would turn their attention to the region of country lying along the western base of the Sierra Nevada mountains, and extending to their summits, they must be hard to please if they cannot be satisfied. The section to which we allude embraces the foothill lands and mountain counties. The following are considered among the most valuable of them: Plumas, Nevada, Placer, Sierra, El Dorado, Amador, Alpine, Calaveras, Tuolumne, Mariposa, Mono and Inyo. If there are people now in California, of small means, who are looking for a locality in which to settle and establish homes, we would advise them to visit any one of the counties we have named, and we believe they will find exactly what they want.

We will take El Dorado county, merely as an illustration, not because we particularly favor it in preference to others. It is about 70 miles long by from 40 to 50 broad. There is not one acre in fifty, probably, of its tillable soil under cultivation. It extends from Sacramento to the Nevada State line. We saw it stated, not long since, by a traveling newspaper correspondent, that, for a distance of 50 miles from the boundary line of Sacramento county, the exception is to find an acre not susceptible of cultivation. All the land in the county, says the same writer, to an elevation of from 3,500 to 4,000 feet is adapted to fruit growing or other agricultural purposes. This does not mean that oranges or other delicate semi-tropical fruits will flourish in these altitudes, but they may be successfully raised at an altitude of 2,000 feet above the level of the sea. At the highest altitude we have mentioned there are to be found luxuriant fields of alfalfa, where there are three or four cuttings a season. This correspondent saw, only a short time ago, trees bending under their burdens of luscious fruit; sheep and cattle grazing on vacant lands, and vines bearing a good crop of grapes. The climate is as beautiful as can be found in the State. The scenery is

picturesque. The other counties offer equal advantages, in every respect, to the one we have described.

The upland sections contain, by far, the largest part of the gold mines of the State. They are but sparsely inhabited and contain more public land, subject to settlement, than any other section. Some of the most profitable dairies are also located in these counties. We think some plan should be adopted by which the advantages, for settlement, of these immense areas of rich lands could be more fully made known. Those who have had practical experience in their cultivation unhesitatingly declare that they will produce nearly everything that is raised in the largest and most productive valleys of the State. It is claimed that the peach, apple, plum and ordinary garden vegetables reach a degree of perfection which can not be attained in the low valley lands.

There is, also, another range of hills called the Coast Range, comprising a tract of country whose area is but a little less than that of which we have been considering, that is equally adapted to the same pursuits. And, strange as it may appear, there is probably not one acre in a hundred that has been brought under proper culture. This should, and will, impress intelligent farming people, in other States of the Union and abroad, with the almost boundless opportunities still offered in California for making homes and acquiring a competence. Offering such advantages of choice localities, cheap lands, rich soil and good climate, these uplands will, at no distant period, fill up with a desirable population and become valuable.

## IMMIGRANTS.

When compared with the departures we find that the State is steadily gaining in its population—from 1,000 to 1,500 arrivals being recorded weekly during the last few months. It is highly gratifying to learn that considerable capital accompanies these people, and that they come to California to locate on account of the salubrity of its climate and the advantages it offers for building up pleasant homes. Those arriving now come at a good time, for there are numerous large tracts of land being thrown upon the market, and considerable government land is yet open to pre-emption and homestead purposes. Immigrants can be assured of cheap lands, prolific soil and unsurpassed climate. There are 60,000,000 of agricultural and grazing lands, and 24,000,000 acres of mountain land in California, with at least 4,000,000 acres of swamp land susceptible of improvement. Less than eight millions of this territory is under cultivation. This statement, alone, ought to prevent anyone from discouraging immigration. California has been pronounced by many tourists the healthiest State in the Union. It has every variety of climate as well as soil. Almost any crop will prove remunerative. But if one crop should fail a score of others may succeed. No other State grows such a variety of crops. A good living cannot be secured, with so little labor, in any other part of the Union. Lands and property of all kinds are constantly appreciating in value. Money judiciously invested in any one of the fifty-two counties is almost certain to afford a sure return. Our vast resources have not yet been one-half unfolded; nor will they be for a long time to come. The articles and statistics to be found in this Journal, relative to agriculture, climate and stock-raising, should be carefully read by those who are considering the advantages, California possesses for making homes. A quarter of a century ago her agricultural resources were considered trifling; but one production after another has proved successful. First it was wine, which continues to increase in quantity and quality until we realize that this interest is destined very speedily to become all important. Then wheat, which we know can be produced beyond the capacities, at present, of transporting it to market. But who would have believed twenty years ago that semi-tropical fruits could have been grown successfully in a large portion of California.

## LAND SALES.

The land sales of the Central Pacific Railroad from January 1st, to September 30th, inclusive, aggregated \$734,000, and it is thought that the transfers of land in this State during same time aggregated \$3,000,000.

## MAJOR BEN C. TRUMAN'S NEW BOOK.

A very handsomely covered and neatly printed copy of this author's last publication, of 63 pages, styled "Homes and Happiness in the Golden State of California," has been laid on our table. Its typographical appearance is nearly as faultless as it seems possible to attain in the use of types. It is profusely illustrated with choice engravings, representing big trees, mammoth hotels, points of interest along the coast, and natural-sized cuts of horticultural productions, fruits, etc. But the great value of the publication is in the quality and varied amount of information which is given in its pages concerning the resources and development of the Golden State. It is replete with reliable and well arranged information of great value to emigrants in search of the best agricultural locations and healthiest temperatures. The author states that this illustrated volume was prepared in the interest of two general classes, namely: immigrants, from all sections of the civilized world, seeking for permanent homes in a healthful agricultural country, and the people of California, who are anxious to share their splendid lands and their incomparable climate with other people of their own kind from all quarters of the globe.

The book is full of matter of interest, not only to farmers, emigrants and tourists, but also to the general reader. It contains full and accurate descriptions of all the celebrated health resorts in the State, with details of the routes thereto, rates of fare, etc., and a map of the summer and winter resorts and other places upon and near the Central and Southern Pacific Railroads in California. In short, it is a compendium of information, touching the climate, soil, production, extent, topography and attractions of the Sunset State.

The subjoined, from the daily *Exchange*, speaks in high praise of the book:

"Major Ben C. Truman has contributed another work to the descriptive and statistical literature of the State. It is entitled 'Homes and Happiness in the Golden State of California,' and is for the information of the home-seeker and tourist. It is gracefully written, for Major Truman has the happy faculty of presenting the most serious and statistical matter in an attractive and readable form, a rare gift with those who attempt this class of writing. The book gives a wonderful showing of the advantages of this State. It is brimful of information on soil, productions, resources and climate, and of incalculable value to the tourist and immigrant. The illustrations are very artistic, noticeably those of our fruits, which are exquisitely executed. The book is published by the passenger department of the Central Pacific and Southern Pacific Railroads, and will be distributed free on those lines."

Major Truman is one of the pleasantest writers on our coast. He possesses the happy faculty of holding, completely, his readers until they have finished closely perusing any article from the facile pen of this talented and genial writer.

## THE MECHANICS' FAIR

The Eighteenth Industrial Exhibition now in progress at the Mechanics' Pavilion on Larkin street opened on Tuesday the 11th, inst, and is in all its appointments, arrangements and exhibits, one of the very best ever held by the Mechanics' Institute. The music is very fine, and the general display delightful to the eye, as well as attractive to the intellect of all who glory in the development of the grand resources of this State. Some of the exhibits are exceptionally fine, particularly those of W. T. Garratt of Garratt's Brass Foundry and the Pacific Saw Manufactory.

Every available foot of space has been utilized, and the products of the various industries skillfully placed on exhibition. Great interest has been awakened, especially in the Machinery Department, which is unusually large, and in fact the same remarks are applicable to every other, the visitors never seeming to grow weary of gazing upon the multitude of California products so artistically presented to view. The patronage thus far is considerably in excess of former years and bids fair to continue so until the close. The scene at night is very beautiful and well repays one for the slight trouble and expense of a visit.

Californians should feel a pride in a publication which is doing so much for the State as this journal is, and send it to their friend.

## THE PACIFIC SAW MANUFACTURING COMPANY'S

Splendid Exhibit of the Mechanics' Fair.—A Beautiful Display, Artistically Arranged upon a Grand Surface of 1,200 square feet.—One of the Principal and Most Novel Features of the Great Exhibition.

It is the unanimous opinion of all who have visited the Industrial Exhibition, that for artistic beauty and purity of design, the display made by this company has no superior. In fact, it is one of the greatest of all the attractions there, people never seeming to grow weary of gazing at the wonderful exhibit, which embraces every style of saw manufactured by the company, all arranged upon a surface 20x50 feet, more or less, in a novel and, at the same time, most practical manner.

The members of this firm deserve the very highest credit for their untiring efforts in establishing this great California industry upon the solid bases it has now attained. These are the sort of men who are an absolute blessing to the State; men of ideas, capacity and unyielding determination, who, by their constant efforts, have finally succeeded in producing a class of saws that, for durability, temper and exquisite workmanship, have no superiors, if even equals, in any part of the civilized world.

Mr. N. W. Spankling is one of the firm, and the inventor of the Patent Inserted Saw Teeth, which has produced a complete change, wherever introduced, from the style heretofore in use. The company make a particular specialty of the manufacture of these teeth, and are receiving orders for them from every portion of the Union, as well as foreign countries.

We very much doubt of any manufactory in the world can place on exhibition a more beautiful, varied and highly-artistic display, the groupings and ensemble of which holds the visitor spell-bound with admiration, eliciting finally the highest encomiums of praise and heartiest exclamations of pleasure. Besides all this elegant display of refined taste, and best of all, is the great practical utility of their goods, and to come right down at once to something that everybody needs we will speak of their new wood saw denominated The Boss with its automatic, self straining, wood-saw frame, which is, without doubt, the very best saw, for the use intended, ever invented.

We advise all our readers to make this company's factory a special visit whenever they come to the city, and those in want of any possible description of saws to seek no further, for better, and cheaper goods, but on the contrary, to patronize at once this deserving company, that is doing, and has done so much to give tone, and high character to the mechanical productions of this State. As we have stated before their stock embraces every article of the kind in general use, their factory being located at 17 and 19 Fremont street San Francisco California.

## PURCHASING AND COMMISSION AGENCY.

We take pleasure in stating that our well known friends, I. G. GARDNER and R. A. DYER, have established a commission and purchasing agency in this city, with their headquarters at No. 310 Pine street. These gentlemen are well and favorably known throughout the entire Pacific Coast as being both competent and reliable. We bespeak for them a prosperous business career, for promptness in the transaction of all business entrusted to their hands will be their rule. Mr. Gardner, the senior partner of the firm, has been in business in this city for many years. Mr. R. A. Dyer, the junior partner, has, for many years, traveled for several leading business houses, and now that he has started for himself, we wish him every success.

## A LARGE SHIPMENT.

The St. Helena Times states that during the month of August Wm. Schettler of that vicinity shipped to this city 12,585 gallons of wine and 824 gallons of brandy. Other large shipments from that section, not delivered, are noted.

## THE FAIR SEASON.

The San Joaquin District Fair, held at Stockton recently was the most successful yet held there. It has been a good season for fairs all through the State, as the farmers, stock raisers, fruit growers and manufacturers have prospered in their respective branches of industry.



## A WORD OR TWO ABOUT CALIFORNIA.

Her future promises to be one of unexampled prosperity, and that it will be one of the most densely populated and wealthy in the Union there is not a shadow of doubt. Our grain fields are among the marvels of the world. Think of tens of thousands of acres in one body all covered with growing grain. The herds of stock are vast almost beyond comprehension. The fruits of California are more perfect in size, and delicious in taste than can be raised in any quarter of the globe. This is the verdict of many of our recent visitors. The vegetables are also of extraordinary size and perfect in all other respects. The strawberry and flowers are of infinite variety, beautiful hues, and worth traveling a great distance to see. The forest trees of cedar, pine, and redwood, grow to an enormous size, and make the finest timber in the world. A gentleman from New England, who recently made the tour of our State, writes to the *Springfield Republican*, "its gigantic mountains all covered with verdure; its beautiful mountain lakes; its numerous and valuable mineral springs; its astonishing geysers; its petrified forests are all of absorbing interest to those who view them for the first time and it would fill a large volume to do them even slight justice."

We often wonder why some of the representative working men of England and other countries who occasionally come to the United States (to find out by personal observation, whether some thousands of farm laborers and other working men of their respective countries would improve their condition by settling in it) do not extend their visits to our State. Here they would learn that California soil is very fertile, and, that her climate permits of comfortable out door work nearly every day in the year; that we have an expanding commerce, and plenty of elbow-room. In short, they would discover that California is a favored land, and in all respects desirable as a home for the industrious, that it is of all lands the home of the industrious poor, that it has capacities and resources which are only awaiting intelligent and persistent labor to develop. There is ample available land to support a population of ten millions of people. In our opinion there is no other country in the world that offers such advantages to the settler.

## ISOLATED SECTIONS.

There are locations in our State which are so isolated and remote from market that the farming element of our newly-arrived immigrants cannot be induced to even look at. But these places will, in a few years, be easy of access, for the iron horse is certain to traverse every region in the State, however distant. The present railroad system has already done much for California. It has aided immensely to its importance in the eyes of the world, and has brought hither to inspect and examine its resources and capabilities, the capitalist, the merchant, the miner and the artisan, who, without the facilities thus afforded, would never have visited its shores. But its extension is greatly needed to open up new settlements in remote sections of the commonwealth; and to this end public opinion should encourage such an enterprise instead of railing at its benefactors, as has been too much the case during the last few years. Wherever the railroad has been constructed in this State the price of land has advanced. Lowly regions of country have become suddenly settled with industrious and enterprising communities, which have been the means of adding largely to the wealth of the State. These places, when once started, rapidly increase in population and wealth. We might mention several counties, that, but a few years ago were almost without inhabitants which are now rapidly becoming known as among the most prosperous in the State. The assessment rolls show, that in proportion to their inhabitants they will soon rank among the wealthiest. Stanislaus, for instance, has a tax roll of \$15,000,000. It was only a few years ago that this county had a very sparse population, and its plains were supposed to be barren. Now it has leaped up into one of the foremost counties in the State—and all on account of its great agricultural resources.

## LARGE FLOUR MILL.

Starr's Flouring mill at South Vallejo has a capacity of 2,200 barrels a day since the recent enlargement.

## CALIFORNIA FRUIT.

The shipment of California fruit to Eastern markets is turning out better than ever. Shippers are beginning to take more pains in picking fruit, and at present prices for transportation there is no danger of the fruit business in this State being overdone. In noting recent arrivals of California fruit the *Boston Commercial*, of August 14th, says:

This year California fruit is coming forward in excellent condition, and the receipts so far show a considerable increase over last season. The season for California green fruit—under which term is included pears, plums, peaches, apricots and grapes—extends from July to the latter part of September; and one of the largest receivers estimates that an average of 400 packages, of all kinds, per week were received here last year. The first receipts this season were about the first of July, and it is estimated that about 1,700 or 1,800 boxes of pears, 1,500 boxes plums, 300 boxes peaches, and perhaps 150 boxes apricots have so far been received. Grapes are just beginning to come in, the first lot having arrived two days ago. The fruit this year has been of excellent quality, though some of the peaches bestowed the effects of the long journey. The receipts at Boston are expected to be largely increased next year, if the California crop be a good one, as the fruit reaches here before either native or Southern fruit of the same kind is in the market, and the demand for it is becoming quite general.

## WHAT THEY SAY ABOUT IT.

The Eastern papers are just now well filled with the experiences of returning Knights from their trip to the Conclave. All speak in an extravagant manner of their princely treatment by the people of California. From a lengthy article in the *Detroit Free Press* written by Henry B. Roney a member of the St. Bernard Commandery, we copy the following:

Calmly viewed in retrospect, there arises in the mind no recollection that would in the slightest degree qualify the almost extravagant accounts of the royal manner in which we have been received and entertained, that have reached you by telegraph. I thought I knew what hospitality was. I found I had not learned the first lesson in that sublime—trait shall I call it? for art or science it is neither. The reception and hospitality extended to Pilgrim Knights from distant portions of our country by the people of California was more than princely—it was kingly. Nor was this feeling of cordial welcome confined to the Triumphant fraternity. The entire Pacific slope seemed to have constituted itself a "Committee at large" to welcome us even at the very gateway of this sunset wonderland and stamp deep into our minds recollections of kindly, heartfelt greetings never to be effaced.

## PROMPT SETTLEMENT.

SAN FRANCISCO, August 14th, 1883.

Messrs. BONACRE D. HUNN & Co., General Agents  
The Accident Insurance Company of N. A.

GENTLEMEN: With much pleasure I acknowledge receipt of your check on the Anglo-California Bank for the sum of three thousand dollars, in full payment of amount insured under Policy No. 66,652 of your Company on the life of Philip J. Staunig.

I take this opportunity to express my admiration of the prompt and honorable dealing shown by your Company in this case. Mr. Staunig made application, with an undertaking with the Agent, that he would pay the premium at the expiration of a certain length of time, and then the policy should be delivered. The accident occurring previous to the expiration of this time, the premium had not been paid nor the policy delivered. Though there was a manifest opportunity for the Company to shirk their responsibility and they had so disposed, and the slightest disposition to do so was manifested. On the contrary, the loss was promptly adjusted and paid to full immediately on filing proofs of loss with the Company.

I therefore most cheerfully recommend your Company to all desiring accident insurance.

Yours truly,

OF BARTON, HOLMES & Co.

O. S. HOLMES.

## WELCOME HOME.

Prof. THOS. PRICE, and his son, Arthur Farady Price, arrived in this city from Europe on Sunday. Arthur Farady Price has been abroad for several years, where he has gone through a thorough course in chemistry and assaying. The many friends of Prof. Thos. Price were joyous over the return of himself and son.

## A GRAND INVENTION.

## The Dyer Cannon Ball Quartz Mill.

The Globe Iron Works Company, 222 and 224 Fremont Street, San Francisco, Cal., Manufacturers.

In every portion of the mining region of California, as well as those of the adjacent States and Territories, there are innumerable ledges of quartz that have, for years, been in the hands of the men who first discovered them, but who have never been able to obtain sufficient means to erect a stamp mill, and give their properties a real, true, practical test.

The great want of such parties has, at last, been furnished by the invention of the Dyer Cannon Ball Quartz Mill, a machine that is destined to work a complete revolution in the methods of crushing ore heretofore in vogue, and which can be procured at a rate so cheap that it is at once within the reach of all.

The company claim that it possesses more desirable qualities than any other stamp mill or other style of crusher, while the total cost is 75 per cent. less for the same crushing capacity. It also has less wear, takes less power to run, and is but one-third the weight of a stamp mill of same capacity. It is made, too, in several different parts, the heaviest of which weighs but 450 pounds, in the twelve ton mill, so that it can be safely transported over the steepest mountain trails upon pack mules, if necessary, into localities where it would be impossible to take the former. It is simple, compact and very strong, having no complicated portions to get out of order, and, while the millwright is absolutely necessary in the construction of a stamp mill, any ordinary mechanic can put the Cannon Ball Quartz Mill together, wherever he can find ten feet square of level ground upon the side of a hill or other spot on which to set it up.

This great machine is the invention of the brothers, A. H. and J. M. Dyer, and was patented Oct. 3d, 1882, and has a capacity of from 1½ to 200 tons for every 24 hours, according to size.

It is a self-feeder, the rock first passing to the crusher, and then on lower down to be completely pulverized by the cannon balls. The company do not claim, for the machine, amalgamating properties, but, that it leaves the gold brighter and freer to amalgamate than any other. It also runs with one-half the power required for a stamp mill of same capacity, and costs, as we before remarked, three-fourths less.

To give an idea of the difference between the weight of this compact little grist and the cumbersome and heavy mills so long in use, we will state that while the former, of 12 tons capacity, all complete, weighs only 1,500 pounds, the latter reaches fully 13,000.

Its motion is rotary, crushing, not grinding, either wet or dry quartz equally well, and running in either direction the same. The wear and tear have been computed to be twelve cents per ton. The cannon balls will crush 150 tons before wearing out, and cost ten dollars a set. The upper track will last twice as long as the cannon balls, and lower track three times as long. It can be run by either horse, water or steam power, and the company manufactures small sizes of one and one-half to three tons capacity, at a corresponding cost, expressly for prospecting or working upon a small scale.

As we stated before, this is a grand invention that is certainly destined to awaken our foothill and mountain miners, from their kip Van Winkle slumbering, and give many a poor, but honest miner, a chance to make his pile and revisit the scenes of boyhood's years.

The cost of the No. 1 mill, of six tons capacity is but \$350, total weight, 2,500 pounds, while that of No. 2, of twelve tons capacity, is \$600, and smaller or larger ones in similar proportion.

These mills are as simple in their construction as a cooking stove, and can be taken apart and put together equally as easy, while any man who can handle a saw, hammer and square would prove fully competent to get out the timber and erect the frame, ten feet square of space being all that is needed for a 50-ton machine.

The company have one in operation at the Mechanics' Fair, where it has been visited by thousands of mining men. They also have two running constantly at Grizzly Flat, El Dorado county, and have an order for two more for the same locality and elsewhere. We advise all our

interior miners, who are interested in the development of our quartz-mining industry, to make it a special point to call at the Globe Iron Works, in this city, upon their first visit hither, and see this wonderful mill in complete operation; and further, our advice to every man, who owns a quartz lead, is to get one of the smaller mills and go to work at once and find out just what his rock will pay. Wake up, gentlemen, set the cannon balls in motion, and our word for it, wealth will soon commence to flow into your pockets, and your long-neglected ledges to yield their immense riches.

## CALIFORNIA RAISINS.

The *Boston Bulletin* has the following encouraging words about California raisins:

These California raisins are made from the Muscat grape and are large and of excellent quality, and are acknowledged to be superior to the foreign. They are also fresher, as they never have the ethereal taste given to the foreign raisins by the sea voyage. The grapes can be grown so cheaply in California and the raisin product is increasing so rapidly that in a few years, possibly in 1885, it is confidently expected that the California raisins can be laid down in this market at \$1 25 and 1 30 for a 24 lb box, at which price the foreign raisins cannot compete with them. At present the freight on the California is 1½ cents per pound, which amounts to 35 cents on 20 pounds, and it is probable that as the shipments East increase, the freight will be lowered a little. The foreign raisins pay a duty of 2 cents per pound and 1½ cent per pound freight, and this on a 20 pound box would amount to 50 cents, and this 50 cents for freight and duty must be subtracted from what 20 pounds of California raisins sell at. It is claimed by the Californians that they can produce raisins fully as cheap as the Spaniards and that in a few years they will control the American market. In addition to their superior quality, buyers will be attracted to California raisins for another reason. They are honestly packed, the bottom layers being fully equal to the top and the boxes have always full weight.

## A BIG STRIKE.

The *Amador Dispatch* furnishes the following account of a rich mining strike: A pocket of quartz of almost unparalleled richness was found less than 100 feet from the surface at the Nevills or Munro mine, three miles south of Jackson, Amador county, September 8th, in which was found from \$75,000 to \$100,000, and being about two tons in quantity. Much of this might justly be termed huge chunks of gold instead of gold-bearing quartz. Some of these immense pieces of almost solid gold were about as heavy as a man could easily lift from the ground. The largest piece was of an oval shape, 16x52 inches, and 6 or 7 inches thick. This gold is almost black, and of the same character as the former rich strikes found in the same mine, and which have heretofore attracted the interest and attention of the mining men of the United States. We have no doubt but that this is the richest find of gold of this kind ever known in the United States at one single time.

## HIGH FIGURES FOR BEEF CATTLE.

The *Modoc Independent* says: Cattle buyers are moving around through Northern California and Southern Oregon, but as yet owing to the high prices asked by owners of cattle, the sales have not been very lively. Billy Nelson returned this week from the Steen Mountain country with about 1,000 head of stock cattle which he purchased of Peter French. Messrs. Bass & Landsey, of Lassen county, also passed through with 300 head of beef cattle. The West Bros. arrived on Sunday from their Oregon ranch, and report cattle in fine condition. They attempted to buy enough cattle to make a good drive, but holders held their cattle at such a high figure that they did not deem it advisable to invest just at present.

## LAND SALES.

The Pacific Coast Land Bureau reports their sales in San Luis Obispo and Santa Clara counties for the past fifteen months as footing up \$603,800, a good portion of which was sold to new arrivals in this State, who had their attention called to the land in the above counties by the Bureau.

Subscribe for THE RESOURCES OF CALIFORNIA.



## WM. T. GARRATT'S

Brass and Bell Foundry, Machine and Hydraulic Works, Located at the Corner of Fremont and Natoma Streets, San Francisco.

Prominent among the great and growing industries of this city and State is the immense establishment of the Hon. William T. Garratt, commenced by him in 1851. In the great fire of that year his buildings were totally consumed; yet, nothing daunted, he started again on Hulelek street to be burned out, a second time, shortly afterwards. With that never-say-die determination, that has so often been exemplified in this State by the men of '49, in 1866 he once more started his business near the corner of Market and First streets, and, after a very successful continuation of four years, still again lost all by the fire that originated in the Mechanics' Mill in 1870. It is said that the spider will continue to spin his web so long as life lasts, and, with more than Spartan energy, our friend again made a commencement, this time locating upon the corner of Fremont and Natoma streets; since then building up the immense establishment now occupying those busy premises.

The foundry is an honor to the city, and proud monument of what real ability and stern, uncompromising perseverance can do. It is said, by those who are well posted upon the subject, that there is not another brass foundry in America that does so great a variety of work, the articles manufactured embracing bells, hydrants, valves, faucets, and every description of miscellaneous castings, to leave out of the calculation altogether the thousand and one minor articles it would be impossible to mention in an ordinary newspaper article.

In iron and general machine business it turns out globe and safety valves, fire hydrants, water and gas pipes. Mr. Garratt also carries a very large stock of iron pipe and malleable iron fittings, governors, and portable blowers, blast blowers for smithies, foundries and steam traps.

One of the great specialties in Garratt's Jackhead, or miner's sinking pump; its lightness, durability and the ease with which the valves can be replaced, making it one of the very best pumps possible to use in sinking. One great desideratum and advantage is the fact that muddy and gritty water does not obstruct or in any way impede its action.

Mr. Garratt also manufactures the Hooker steam pump, a purely California invention, that has never yet failed to come off victorious wherever and whenever placed in competition, and also received the gold medal from the Mechanics' Institute. This great pump is particularly valuable for mining, irrigation and boiler feed, and is the best steam pump, for general use, on this coast. Mr. Garratt having the exclusive right to manufacture it west of the Rocky Mountains.

The largest bells in use here have all been made at this foundry, and they, as well as his other goods, have been and are constantly being shipped to Australia, China, the East Indies, Japan, the Sandwich Islands, Mexico, South America and Islands of the Pacific.

The place is literally a beehive of industry, something that will do one good to behold. It employs, at present, two hundred men and boys, more or less, some of the very best workmen in the establishment having learned their trade there.

In this connection we can not refrain from expressing the wish that thousands more would only do as Mr. Garratt has done, would be actuated by that same grand, comprehensive spirit and desire to build up California, and give her young men an opportunity to show the world the material of which they are composed. We have the grand water power, climate and many, very many great advantages, but sorely need the men to make these vast natural resources available.

The proprietor of the Brass Works under consideration is a native of Connecticut. While still a child, his father emigrated to Ohio, he growing to manhood in Cincinnati. At the age of 20 he started for California, arriving in the spring of 1849, and going at once to the mines at Deer Creek, now called Nevada City, where he remained only a short time, returning to San Francisco and starting the business we have described in connection with Mr. G. W. Shultz, whom he bought out in 1851.

For several years he held very large interests in steamboats plying upon our inland waters, many of which are named for different members of his family. For more than thirty years he has been an active member of both the Old Fellows and Masonic Lodges, and is also President of the Territorial Pioneers. Politically he represented San Francisco in the State Legislature between the years 1870 and 1874.

At the Mechanics' Fair now being held in this city, the Garrett Brass Foundry, Machine and Hydraulic Works, have made an extremely comprehensive, as well as artistic, and practical exhibit, having a full line of pumps in active operation in the Machinery department, including all heretofore spoken of in this article, as well as the Langlois Patent Rival, Marine, Mining and Irrigating pump.

The Rival pump is adapted to hand, windmill, horse, or steam power, and is the cheapest and best pump offered in the market, for handling muddy or gritty water, coal, chips, sand or gravel, and

cannot be injured thereby, and requires only the ordinary bump or cotton packing. It has large water-ways, and full area of suction. Mr. Garratt also exhibits the double acting lift and force wine pump, made wholly of brass, being far superior to all hand wine pump. It is mounted on plank, with flange, cast on bottom.

In conclusion we would say to the practical visitor, wine grower, fruit raiser, and farmer, by all means pay a visit when in the city, to this great California establishment, where the goods offered for sale are manufactured on the spot, and not imported, and if you wish to procure anything in that line, there is not, and cannot be in all America, a better or more suitable place to make your purchase. Patronize home manufacturers every time; and especially, men who are striving with all their might, to develop the great resources of this State, and to help her young men onward, towards the acquisition of a good practical useful trade.

## THE COMING VINTAGE.

Under the above heading, a writer in the Daily Chronicle of this city furnishes that paper with the following excellent article:

The accounts from all parts of the State where the growth of the vine is made a specialty are of the most satisfactory description, and it really seems as if the wine-presses will be insufficient for the crops and in many instances recourse will be had to the old-fashioned method in use five years since. At the present stage of the season it is as yet difficult to make an approximate estimate of the grape crop, but, taking as a basis the supposition that there is an increase of 15,000 acres in our vineyards, this would give an augmentation of 3,000,000 gallons this season over the 10,000,000 production of last year. The difficulty of estimating the growing crop is increased through many vineyards now first coming into maturity, and through others having been plowed up and planted with foreign varieties more fitted for wine, table and raisin purposes than the native growths, and it will be two or three years at least before these will commence to yield in paying quantities. The advances from the leading counties, such as Napa, Sonoma, and Los Angeles, state that the vines are in magnificent condition, and that, barring unforeseen events, the yield will be unparalleled in the State, some sanguine judges estimating the value of the wines at over \$4,000,000. There has been a large increase in the facilities of the wine-makers to handle a large crop, some of the steam-presses and appliances having excited the admiration of the French Commissioner who was sent here by his government to report on the viticultural resources of California. From present appearances it is supposed that grapes that commanded at the wineries from \$20 to \$22 50 a ton will show some decline in price, especially among the lower qualities of grapes, such as the Mission. Even at a reduction there is an ample margin of profit, considering that five years since this species only brought \$8 a ton. Such prices, however, would never have given that impetus to a higher range of cultivation that will probably place California at the head of the viticultural countries of the world.

In view of this increased estimate in the yield the transactions in our native wines are of somewhat inactive character, the more so as it is calculated that from 800,000 to 1,000,000 gallons of wine remain of last year's growth. But good qualities always command fair prices. There is another question that induces freer offerings, and that is the cooperage, the demand for vats, casks and barrels in the various vineyard districts being larger than the supply; but this want will probably be remedied by the time of the vintage. Great attention is being paid to the proper preparation of the foreign species of grapes, the product being deemed invaluable in the future, not only in the making of higher grades, but also for blending purposes with the cheaper varieties. There is an immense interest taken in the progress of the viticultural resources and an earnest endeavor on the part of our wine makers to surpass the qualities of European wines that have hitherto been so much in vogue in this country. The result during the past year has been satisfactory so far as the demand at the East for our wines is concerned. Unfortunately these wines are sold under foreign seals, but it is not the fault of the maker or dealer on this coast who, owing to the large prices they have to pay for bottles and casks, and the heavy cost of transportation, are obliged to ship their wines in bulk. But this will be remedied gradually as our wines are recognized at their inherent worth.

## COPPER.

J. W. Cook, an old Chillicoite now farming in the vicinity of Orland, has struck a rich thing in connection with J. L. Jordan, a miner of much experience. They have discovered a rich lode of copper about two miles northwest of Smith's Mill, on Stony creek. The ledge is about twenty feet thick, with the necessary wall rock to indicate a lode. It has long been known that copper ore has been found on Stony creek. About twenty years ago, Mr. Scribner, an old settler there, discovered some rich pieces of ore, but no ledge could be found. The location of the present discovery must be about ten miles from where the first indications were found.—Red Bluff Sentinel.

## THE ACCIDENT INSURANCE COMPANY

OF NORTH AMERICA.

ORGANIZED, A. D. 1872.

President, ... SIR A. T. GALT, G. C. M. G.  
Vice-President, ... RON. JAMES FERQUIER,  
Managing Director, ... EDW. RAWLINGS.

HEAD OFFICE, MONTREAL, P. Q.

## IMPORTANT

-TO-

## Commercial Travelers AND MERCHANTS.

The new form of Policy issued by this Company grants permission for TRAVEL TO AND RESIDENCE IN EUROPE AND MEXICO WITHOUT EXTRA CHARGE.

The following conditions, SO OBJECTIONABLE TO COMMERCIAL TRAVELERS, and heretofore found in all Accident Policies, is not contained in this Policy, viz: "Standing, riding or being upon the platform of moving railway cars, other than street cars, or riding in any place not provided for the transportation of passengers," or being on the bridge of any railway are hazardous not contemplated or covered by this contract. And no sum will be paid for loss of life or disability (the consequences of such exposures) happening to any person other than employees, who shall have given notice of such occupation, and paid the fixed premium for such hazards."

IN EVERY RESPECT THIS POLICY IS THE BEST EVER ISSUED.

Call at our Office and Examine before you take or renew a Policy elsewhere.

The record of this Company is also unequalled. Not a single contest at law since its organization in 1872.

## H. D. IRWIN &amp; CO.,

General Agents for the Pacific Coast.

405 CALIFORNIA ST.,

SAN FRANCISCO, CAL.

JOHN T. TOY, City Agent.

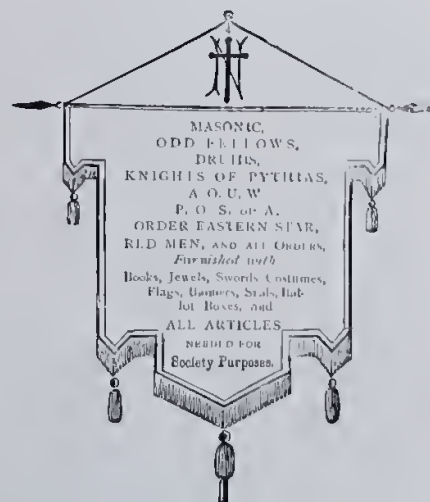
Established by Daniel Norcross in 1849.

## NORCROSS &amp; CO.,

MANUFACTURERS AND IMPORTERS OF

## REGALIA, PARAPHERNALIA, ETC.

MILITARY GOODS, FLAGS AND BANNERS.



KNIGHTS TEMPLAR COSTUMES A SPECIALTY.

NO. 6 POST STREET.

Masonic Temple,

San Francisco.

## FOR SALE.

## A FINE RESIDENCE

-OF 16 ROOMS, ON-

Clay St., bet Franklin and Gough.

Also one of 9 rooms on Folsom street, between Twenty-first and Twenty-second.

Twelve lots in Bay View Homestead Association.

Lot on Twenty-seventh avenue, adjoining Paint Lobos road; 70x120 feet.

One hundred and fifty thousand acres land in Tom Green county, Texas.

## 5,000 ACRES

Alfalfa, Orchard, and Vineyard Land

-IN-

## FRESNO COUNTY,

-NEAR THE COUNTY SEAT-

At \$10 Per Acre.

For particulars apply to

ROBERT PERRIN.

402 Kearny Street, San Francisco.

## COMMERCIAL

## INSURANCE COMPANY

OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, June 30, 1883, \$390,524.06

Losses Paid Since Company was Organized, \$906,379.13.

JOHN B. WISE, President

CHAS. A. LATON, Secretary

## OFFICE.

No. 405 California Street, S. F.



SOLANO COUNTY.

\_\_\_\_\_



## JUST WHAT THEY SHOULD DO.

Bro. Filcher, in the *Placer Herald* of Sept. 22nd, says:

"The prosperity of our county depends, to a great extent, on the mining industry. We have plenty of mines in Placer, some of which are being worked and doing well, and many others which might be made profitable if developed and properly worked. To develop and work our mines we need more or less capital, and to attract capital we must make a stir. There is much that might be said about our mines to advantage, but the information is largely in the possession of the miners. They should make a point to inform the press of their operations. Any item regarding a new discovery or development in the mining line, or the result of a run or clean up, will be thankfully received by the *Herald*, and take our word for it, such items, when faithfully recorded, go far to increase the interest in our section of country, and promote the development of its at present dormant resources. Let us hear from you, miners, everywhere, as to what you are doing."

Good for Filcher—stir them up—arouse them from their lethargy, and from the almost unlimited resources of old Placer county there will ensue results which will astonish everybody. Placer county, in our opinion, has hundreds of what are termed low-grade ore mines, that, with an outlay of a small amount of money—in some cases, of only a few hundred dollars—will yield good wages for a man's natural life, and his children's afterwards. And not only does this hold true in Placer, but in several of the mining counties adjoining. Men having small veins of quartz can now obtain the means of working them for very little money. It is said, by those who have tried it, that the DYER CANNON BALL QUARTZ MILL, a new invention, advertised in the columns of this paper, is just the mill for poor men, with small means, having small, paying quartz veins to work. As will be seen, by reading the description of this new mill, it is inexpensive, comparatively. Miners, arouse yourselves, now is your time! Give the information to your local papers, and we will spread it broadcast to the world, through THE RESOURCES.

## IMPROVEMENTS IN SHERRY-MAKING.

Manuel T. De Abren has received, as heretofore noted, a patent for an apparatus for maturing sherry wine. It consists, says the specification, in a novel construction and combination of parts. By the old process the vessels containing the wine are exposed to long continued artificial heat, in places which may be closed tight. This makes danger of too great heat, also of fire; injures the packages so that recuperating is necessary and causes large loss by evaporation. By Mr. De Abren's invention there are no furnaces or fires in the building, nor regular application of artificial heat. A building or chamber contains packages of wine. This chamber is open at the top, having only beams across to support another tier of packages above. Around the upper tier of tanks is a glazed enclosure, and around this again, at such distance as to leave a considerable space, a second glazed enclosure. Through these enclosures the sun's rays enter freely and these are to do the work of maturing the sherry, being concentrated and intensified by the air chambers. This obviates the necessity of artificial heat, except in the night time or in cloudy weather, in which case heating pipes are introduced from the outside to temporarily supply the sun's place. This process is calculated to do away, mostly, with the cost of fuel, obviate danger from fire or over-heating, and the injury to packages resulting from great and long-continued artificial heat.

## HOW ALFALFA PAYS.

A writer in the *Record Union* states "that a gentleman residing in San Joaquin county lately purchased twelve acres of bottom land, paying \$200 an acre for it. When questioned as to the profits he expected to receive on the investment, having planted the land to alfalfa, he replied that from several cuttings he expected to get not less than four tons per acre, and that it was surely safe to value the hay at \$6 a ton—it is now worth about twice that. Thus the alfalfa would pay 12 per cent. per annum at \$200 an acre for the land. The pasturage would pay harvesting expenses, leaving the hay crop net.

## CALICO MINING NOTES.

The lower tunnel of the Garfield has been pushed forward twenty-four feet for the week ending August, 18th. The north drift at the bottom of shaft is being driven ahead. Large deposits of ore will be mined as soon as the tunnel is completed on the lower level. The bullion shipments from this mine speak for its richness. From four to eight miners producing \$10,000 in bullion per month for several months just speaks more eloquently than words.

The Gobbler mine still has a large force of men at work. It is producing more ore of a high grade than ever before. The south drift is still in good ore and is being pushed forward rapidly. Mr. Dessallier, the foreman, is quite elated over recent developments and speaks very encouragingly of the bright future of the mine.

The Occidental, in the same mineral belt as the Gobbler, has been leased to Euglika & Co. A fine grade of ore is being mined by the lessees. All that the mine needs is a little energy on the part of the owners, to do a little work towards developing instead of "gophering," as is so common among mine owners in this district.

The Bi-surek, adjoining the Humburg, has been bonded by the company in which Lieut.-Gov. Duggel is a member. Work will be commenced in earnest by September 1st. An ore bin and shutes to handle the ore cheaply will be completed by the first.

Work on the Humburg has been suspended for awhile. The owners are taking in San Bernardino for a change. Over a thousand tons of ore are already mined and on the dump.

Work on the Newbill mines situated about three miles east of the Waterman mine, is being pushed forward as rapidly as possible.

The Cuba No. 1 mine is showing up as well as ever. It will not be long before another shipment of ore will be ready for the mill.

Mr. Spurella has resumed work on the Morning Brow in East Calico.—*Calico Print.*

## AURIFEROUS GRAVEL.

Col. Mendell says in his report to the Secretary of War: The quality of auriferous gravel on the slopes of the Sierras is practically unlimited, but only a comparatively small quantity of the whole deposit can be worked by hydraulic method, by reason either of lack of fall, capping by volcanic drift, or poverty of the gravel. An inspection of the mines tributary to the North Fork of the American (including Forest Hill) shows that they contain a workable gravel of about 75,000,000 cubic yards, of which about 20,000,000 yards are at Gold Run.

On Bear river there remains about 50,000,000 yards. On the Yuba they may be assumed at 700,000,000. On the upper Feather the miners find natural storage for their detritus; on the lower Feather, near Oroville, there seems to be no practical method of storing the detritus. On the Cosumnes and other southern rivers there are considerable amounts of gravel, but information at hand is not sufficient to warrant positive estimates. The aggregate amount of gravel not subject to the hydraulic process, but which can be worked by drifting, must be considerable, and, as wages become cheaper, promises to take great proportions and to continue for several generations.—*Nevada Transcript.*

## FRAUDULENT WINES AGAIN.

Albert Rhodes, at one time Consul at Ronen, has sent an important report to the State Department, which has been officially published. A former report on fraudulent wines drew upon Mr. Rhodes some bitter criticism by French producers and dealers. He now reaffirms all he first reported, and supplements it with new charges and proofs. These show that the falsification and adulteration of wines have not been checked in the least. He cites the fact that the French Government itself has brought out by official analysis all the facts he had recited. These disclosures were made in the interest of public health by a fearless bureau of the Parisian municipality, and subsequently by the State Department itself. Mr. Rhodes now charges that wine production has for some years been steadily decreasing in France, and the demand has been met for what could not be grown by deliberate manufacture of spurious wines.—*Record-Union.*

O. P. SHEFFIELD. J. PATTERSON. N. W. SPAULDING.

PACIFIC SAW  
Manufacturing Company,17 & 19 FREMONT STREET,  
SAN FRANCISCO.

## A NEW WOOD SAW!



THE LATEST, THE BEST.

The above illustration shows an AUTOMATIC SELF-STRAINING WOOD SAW FRAME. The saw is strained by means of a Steel Spring secured to the wood and pieces with Metal Bands. With this device a saw is perfectly and automatically strained at all times. No cross bars or braces are required to give stiffness to the frame. The space in wood saw frames usually filled up with such devices is left open, giving the saw greater capacity for sawing large sticks of wood, wide planks or boards. There is no screw straining rod to get out of order.

Price, complete with Pacific Saw Mfg Co's Extra Blade, set and filed, ready to work, each, \$1.50; with their second quality blade, set and filed, ready to work, \$1.25; with imported blade, set and filed, ready to work, \$1.00.

A LIBERAL DISCOUNT TO THE TRADE.

AGENTS FOR C. B. PAUL'S  
CELEBRATED FILES.Planing Knives, Currier Knives, Saw  
Mandrels, and Saws of Every  
Description Made to Order.THE CALIFORNIA  
POWDER WORKS.

**Santa Cruz Gunpowder.**

**HERCULES AND MINING POWDER.**

**SUPERIOR SPORTING POWDER.**

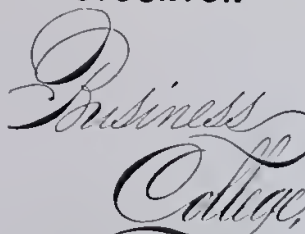
**CABINET, EUREKA, QUAIL AND DUCK SHOOTING.**

**Sea Shooting, Valley Mills.**

**Pacific Rifle and Pistol Powder.**

ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
Kegs.SHOT,  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.PRINCIPAL OFFICE,  
No. 230 California Street,  
SAN FRANCISCO, CAL.

## STOCKTON



F. R. CLARKE, Principal.

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the year. Tuition is less than our full board rates. Excellent board \$10 per month.

## COURSES OF STUDY:

Full Business Course, Full Normal Course,  
Teacher's Course, Book-keeping Course,  
Arithmetic Course, Special Courses,  
Languages, Telegraphy.

The COLLEGE JOURNAL, containing full particulars sent postpaid. Address: F. R. CLARKE,  
P. O. Box 15, Stockton.

## EDGE HILL

VINEYARD, WINE CELLAR AND  
DISTILLERY,

Near St. Helena, Napa County, California.

SCHEFFLER'S CELEBRATED VACUUM DISTILLED

## SANITARY BRANDY

—AND—

Brands of Red and  
White Wines.STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTEDBurgundy, Bordeaux and  
Rhine Wines.Orders Received and  
Promptly Attended to by

WM. SCHEFFLER,

PROPRIETOR.

HOME MUTUAL  
INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY.....1885.

## FIRE ONLY.

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

## OFFICERS:

J. E. HOUGHTON.....President  
J. L. N. SHEPARD.....Vice-President  
CHAS. H. STORY.....Secretary  
R. H. MAGILL.....General Agent

## J. O. SPRECKELS &amp; BROS.,

Shipping and Commission Merchants.

## HAWAIIAN LINE OF PACKETS.

325 Market Street.

SAN FRANCISCO.

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the

## STANDARD SYRUP,

A SUPERIOR ARTICLE.

Put up in Barrels Expressly for Home Consumption.

ALSO,

## EXTRA HEAVY SYRUP,

In Barrels for Export.

## REFINED SUGARS,

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.



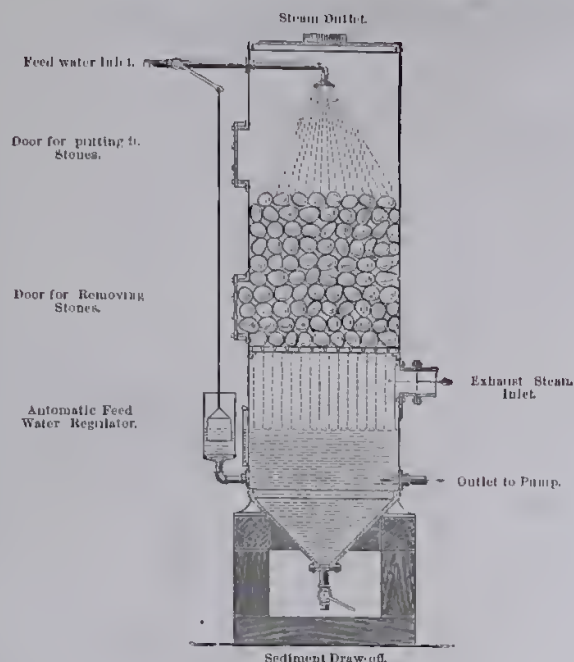
**LLEWELLYN FILTER-HEATER,**

Patent Issued Aug. 12, 1879, Re-issued Aug. 19, 1881.

For the Prevention and Removal of

**STEAM BOILER INCRUSTATIONS**

WITHOUT THE AID OF CHEMICALS.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 percent of water by condensation. Prevents the formation of scale, and saves fully 25 percent in fuel.

Further particulars with full descriptive circular and price list can be obtained at the office of the

**LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,**

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufacture, Columbia Foundry, 133 and 135 Reale Street.

**The California Lloyds****UNION****INSURANCE COMPANY**

OF CALIFORNIA.

THE CALIFORNIA LLOYDS,

(Established in 1861).

**FIRE AND MARINE**

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 476 and 448 California St.

Agencies in all the Principal Cities of the United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary. O. P. FARNFIELD, General Agent. GEORGE T. BOHEN, Surveyor.

**PRESCOTT & CO.,**

PROPRIETORS OF

**Queen City Market,**

DEALERS IN ALL KINDS OF

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Choicest Eastern Hams, Bacon, Lard and Foreign Sausages of all kinds.

CORNED BEEF AND PORK FOR SALE BY THE BARREL.

1164 1158 Market St., and 6-8 Taylor St.

**FIRE AND MARINE****INSURANCE AGENCY**

OF

**HUTCHINSON**

&amp; MANN,

Nos. 322 and 324 California Street and 302 and 304 Sansome Street,

**San Francisco.**

Agents for The

Agricultural Insurance Co., New York, \$1,521,630.

Fire Ins. Ass'n (Limited), London, Eng., \$1,573,291.

Glad Insurance Company, Philadelphia, \$1,208,645.

New Orleans Ins. Ass'n, New Orleans, \$573,216.

St. Paul F. &amp; M. Ins. Co., St. Paul, Minn., \$1,048,673.

Standard Fire Office (Limited), London, Eng., \$1,300,000.

Tenthon Ins. Co., New Orleans, \$118,045.

**MARINE.**

The London and Provincial Marine Insurance Company, London, \$6,278,362.

La Fonciere Marine Ins. Co., Paris, \$2,250,000.

Capital Represented, - - \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. L. CHALMERS, Special Agent and Adjuster.

**MINING IN SOUTHERN CALIFORNIA.**

The Los Angeles Herald gives a short sketch of the progress of mining in Southern California during the past few years. We quote the following:

The progress of Southern California has been published from time to time in regard to the growth of agricultural industries, but no comparison has yet been made in regard to the growth of the mining industry. In Los Angeles county, where are the best placer mines and the oldest in California, the yield has not been as large as it might have been, on account of some legal contests, that have stopped the opening of some very extensive beds of auriferous gravel. The quartz mill at the Frazier gold mine is idle on the same account, so that the yield for the past year amounts to probably \$60,000 of gold and \$17,000 in silver. Had the hydraulic mines been worked, and the Frazier mill been running, the yield might have been quadrupled in 1882.

In San Bernardino county there has been no special hindrance to mining, but on the contrary great and profitable progress. The mines of that county produced in 1882 about \$150,000 in silver and \$20,000 in gold. But since the beginning of 1883 the work of preparation began in 1882 has resulted in a most copious output of silver. It is estimated that the Bonanza King Mine, at Providence Mountain, will yield in 1883, \$700,000; the Digger mill, \$200,000; the Waterman mill, \$300,000; the Alhambra mill, \$250,000; the Ilex mine, north of Calien, \$200,000; while of ore shipped from Lavin, Brad, Eagle Mountain, Grey Eagle and other places in the county to San Francisco, the value cannot be less than \$250,000 more, making for a calendar year not less than \$2,550,000.

This prodigious change in a year will astonish the people of California and show that Southern California is the best mining country in the world. San Diego county is looking up and increasing the output of bullion, principally gold. The yield for 1882 was \$100,000 gold, and \$100,000 silver. In 1883 the yield will be largely increased by the Pinnacle and Gabriel mines, which will double the gold yield at least, making \$300,000 for that county. In the north part of Los Angeles county there is a vast amount of gold bearing rock and auriferous earth that only needs capital and intelligent mining to be immensely profitable. From the arrangements that are now being made to develop many mines that are now open, and to open a large number of rich claims, it is fair to presume that in 1884 Southern California will produce in the three counties of Los Angeles, San Bernardino and San Diego, not less than \$5,000,000. The mineral is near the surface in our richest mining region, for gold, silver and copper, while soda and borax are found in inexhaustible quantities, like the soil of the prairies."

**SIERRA COUNTY MINING ITEMS.**

From the Forest City Tribune, of recent date, we take the following:

Seventy-five men are employed at the Baby mine. The Homestake quartz mill, located on Rock creek, is running steadily.

A large shipment of gold bullion was made from the Rainbow mine last Saturday.

The Bald Mountain Company, of Forest City, cleaned up 170 ounces of gold last week. They are finding good pay in Lowell avenue tunnel.

Fifty-three ounces of gold was realized from 400 carloads of gravel taken from South Fork ground and washed last week. The Forest City people feel highly elated over such fine prospects.

A gentleman from San Francisco examined the Plumbago mine last week, with a view of making a report on the same to an English company. The Plumbago quartz mine is located at Minnesota. The mine has been opened sufficiently to prove that it could be made a big-paying property if properly handled.

J. Minor Taylor is expected to arrive here from Virginia City soon to start up work at the Savage mine. The recent developments made by the Bald Mountain Extension Company are liable to create a boom all along the ridge this summer. It is the opinion of all those who have paid any attention to the workings of the Savage mine that a channel will be uncovered in the claim at an early date.

**DRY SEPARATION OF GOLD FROM SAND.**

A novel apparatus for separating gold from sand with out the use of water was recently completed and tested in this city. It is intended for use in the placer regions of the West, Mexico and Central America, where gold bearing sand is found at a distance from water sufficient for hydraulic mining. The machine is about five feet in diameter, and is arranged to throw the sand by centrifugal force against a "wall" of mercury maintained in position by centrifugal action. In this way, it is claimed, every particle of gold is brought in contact with the mercury and amalgamated, while the sand is blown away by means of an air blast. The machine is said to clean a ton of sand in twenty minutes, and to be so thorough in its operations as to make it possible to work over with profit the tailings of mines worked by other systems. The power required to operate the machine is not given. —Scientific American.

**THE TIDE OF IMMIGRATION.**

Week by week we are told of the arrival of immigrants to the tune of 1,000 or 1,500. A large number of the newcomers are men with families growing up around them, and a little means in their wallets. They are occupying the waste places of the State and developing new homes a better rich resources and hovers of twenty will largely repay then toil. The arrival of such as these will most surely call for a large development of manufacturing establishments of various kinds, and these in turn will call for more manual laborers and skilled mechanics. These will furnish an ever increasing consumptive market for the products of the farm, the orchard and the garden, and each branch of growth provides a further growth in the other branches. The tide will continue to set this way. It is a pleasant reflection that we in Semi-Tropic California stand so advantageously related to this as compared with other parts of the state. The Sunset Route is among the prime factors in this good work of immigration and development. This system of railroads has offered the most advantageous rates of all the lines, and hence this stream of new blood passes along this main artery of travel through Los Angeles. The work of natural selection and selection, as the doctors say, will seize on and appropriate what of this is best suited to our needs. To winegrowers, orchardists, gardeners, miners, stock-men, and scores of other occupations, this region will hold out warm hands of cordial welcome, and here, under their own vine and fig-tree, many of the new Argonauts will take up their abodes. It will be like those famous Greek wanderers of old who found the Lotus Land. Once here they will find an enticement sufficient to cause a resumption of their wanderings. They will come to stay, to develop our rich resources and enrich themselves.—Los Angeles Express.

**A GREAT ENTERPRISE IN SAN BERNARDINO.**

The people of San Bernardino are showing great mettle in improvements. They have formed a syndicate to construct an immense reservoir in Bear Valley, by building a monster dam across Bear Valley Canyon, 100 feet long and 45 feet high. It will form a lake covering more than a thousand acres to twenty feet deep. This will be a very nice little lake and a comfortable kind of reservoir. The land has been purchased which will be overflowed by this lake, and work will go forward at once and carried to completion while the canyon is nearly free of water, so that the great basin of Bear Valley can be filled by the rains of next winter. Heretofore the water which ran into the valley in the winter has barged itself down the canyon, but that discharge will be stopped by the dam, and the little pond that usually remains there will be turned into a beautiful lake.

The dam will cost \$10,000 and the whole affair cost about \$35,000. The interest on this will be paid by leasing 2000 acres of the surrounding land belonging to the syndicate for pasture. There is always water in Bear Valley, and the ground is of such a nature that the water will not sink, the only loss being from evaporation. The parties in the enterprise, so far as known, are Judson & Brown, J. G. Bart, Louis Jacobs, Hiram Barton, J. A. Gibson, F. P. Morrison, W. O. Boutler and G. A. Cook. To this list of local capital is to be added George W. Mayde, of San Francisco.

This is just the kind of enterprises we want in Southern California, and we hope to see more of them begun at an early day. There is no doubt of the success of the San Bernardino project, and this success will produce a "go and do likewise," Los Angeles Herald.

**VITICULTURE IN THE SANTA CLARA VALLEY.**

In speaking of the future of this interest the San Jose Mercury says:

It was never so bright as at present. Vast sums of money are being spent in preparations, but all feel sure of obtaining full returns for the outlay. The grape crop has never failed yet. This year it is light in places, but with the prices offered the owner of a good vineyard has a bonanza of his own even then. All that is needed is care in the choice of soil and exposure, in the selections of cuttings and in the cultivation of the vines, and in these matters a man has simply to watch his neighbor. Wherever he locates he will find vineyards near him, which can be taken as models in all respects, and men of brains and capital are providing a sure market for all the grapes that can be grown. Such being the facts, it seems that no man can be wrong in planting a few acres with vines, if he has the right soil. Ten acres, properly cared for, will bring a good livelihood for a family without any hard work, and, indeed, demanding no more labor than is necessary to exercise a healthy man and his family. Such an amount of land can be had in day for from fifteen hundred to two thousand dollars, and the whole expense of bringing a ten acre vineyard into good bearing condition need not be more than five hundred dollars. In whatever other business can a comfortable and independent livelihood be secured for so small an outlay.



## THE SEEDLESS SULTANA GRAPE.

J. B. West, of Stockton, one of the well known State Viticultural Commissioners, furnishes the *California Guide* with the following valuable information concerning the Seedless Sultana grape:

To whom belongs the credit of first introducing this grape to California, I am unable to say. As it is a variety well known to nurserymen in the Eastern States and Europe, it was probably sent in several collections. In 1865 I saw it among the vines that were received from Col. Henshaw. I also saw a vine of it in the conservatory of the Agricultural Department at Washington, and was told that cuttings had been sent to California. There were a few vines on my place as early as 1862. Not considering them of much value, I did not propagate them until 1868, when I commenced to distribute them from my nursery, and at the same time planted a few more for family use. It is from these few vines that a great portion of the vines now planted in the State have sprung. In the years up to 1878 I did not consider them of any special value, as from the mode of training that I adopted—the short spur system—they were only moderate bearers, and my time being occupied by the nursery business, I did not give them the attention they deserved.

In 1877 I sold 400 vines to Mr. R. B. Blowers, of Woodland, who was the first to make their cultivation a marked success in California. The vines under his judicious management have been made to produce wonderfully, and an entirely new aspect has been given to the culture of the seedless grape in this State.

The success of Mr. Blowers would indicate that the vine requires high cultivation. By these means he gets very large crops, as much as ten and twelve tons per acre. My soil is of a different character, being a strong, clayey loam, underlaid with marl, into which the roots have difficulty in penetrating. I do not irrigate, the consequence is that my vines require a longer time to arrive at full bearing, and I have only been able to get from five to six tons per acre, although my vines are one year older than those of Mr. Blowers.

The Sultana requires long pruning, by the short spur system, which is used on the Mission and many other vines; it is not profitable, as I have learned by many years' experience. I can not, in this paper, give a full description of the method of long pruning, which can be better learned in the vineyard. It will be sufficient to say that the stock is headed down to about a foot from the ground, and from this point two or more canes, according to the strength of the vine, are brought up for bearing wood the following season. At the winter's pruning these should be left two or three feet long, and also short spurs with eyes enough to produce wood for the next year. All the balance of the vine, including the wood that has borne a crop last year, should be cut off. Those who have followed the short spur system, and have their vines already trained for this system, will find it to their advantage to change it immediately, even at a loss of a portion of their crop for a year or two.

The maturity of the grape varies much with the season and locality. At Stockton, in early seasons, I have been able to commence drying the fruit by the tenth of September. This has not always been the case, however. In 1881, the season being backward, I commenced on the 20th. In 1882, being a still more backward season, I was compelled to wait until the 25th of the same month before I could commence to pick. The consequence was, that I lost a portion of my crop by the unusually early rains which commenced a few days after.

At Fresno, where the climate is much hotter and drier, I am told that the grape will ripen by the 20th of August. This will give growers there, and in other localities similarly located, a great advantage over us, as they can easily have their crop cured in ten to twelve days, whereas, if they were compelled to wait a month later, it may take from twenty to thirty days. Care should be taken that the grapes are not picked before they are fully ripe, which can always be determined by the taste. When vines are bearing heavily it will be found that some bunches are riper than others. The early clusters should be picked as soon as ready, as this will give the others a chance to mature. It is the custom in California to cure grapes upon wooden platforms, or trays, and it is particularly desirable to do so with this grape, as it is very small, and would be wasted by drying upon the ground. After the raisins are fully cured it is only necessary to rub them from the stems and pack for market. It is the custom in the Sultana districts of Asia Minor to dip the grapes in lye before drying. This cracks the skin and allows the grapes to cure much quicker than they could otherwise. They are also dried in the shade, which gives them the light color so noticeable in the imported article. It would be well for our raisin-makers to experiment upon a portion of their crop, with a view to imitating the imported Sultana.

This vine is subject to the same diseases that all grape vines are. Its tender leaf is a favorite with the rabbit, and the vine-bopper takes special delight in ravaging it, yet such is its vigor that when pruning time comes we hardly notice their work.

The seedless Sultana raisin, as produced in California, has a very delicate flavor. It is not, perhaps, as rich as the Muscatel, but it is very suitable for cooking, and should recommend itself to every housekeeper who uses the dirty, gritty Zante currant, or the high-priced imported Sultana. To the city baker and picker it would be invaluable. Of its merits as a wine grape, I have no means of determining. I was, last year, compelled to sell the product of seven acres of Sultana grapes, that the season would not permit me to dry, to the wine-makers. They were satisfied, and wish to buy my crop this year.

The amount of seedless raisins thus far produced has been so limited that it is hard to determine what the demand will be for them. When the vines now planted come into bearing we will have to look to the East for customers. Previous to this time no merchant has been guaranteed enough stock to justify him in seeking trade elsewhere. There may come a glut in the market, in consequence of over-production, and for a few years the price may be low. This will have a tendency to increase the consumption, and in due time raise prices

## MANUFACTURING IN SAN BERNARDINO.

In a conversation with Mr. R. W. Waterman, since his return from the east, he informed us that while there to meet a prominent paper manufacturer who evinced considerable interest in Southern California, and made numerous inquiries concerning the opening here for a paper mill. There can be but little doubt but that an enterprise of this nature would pay handsomely on the investment in San Bernardino. We have in this county superior manufacturing facilities in water power, climate and location. Situated directly on the Southern Pacific railroad, with the California Southern pointing toward the great region north of us, we have railroad facilities to reach the whole interior country. Every sheet of paper used in Southern California and Arizona has to be imported, while vast quantities of paper material roll on the ground for want of profitable use. On the desert the Yucca furnishes unlimited material for the paper maker, which is taken no further advantage of than to be reduced to pulp in small quantities and shipped away to manufacture and afterwards shipped back again in its perfect state. There are vast stores of paper material that could be utilized here had we a mill to use them, and there is a large field to which such a mill could look for a market. There is money in wrapping paper, straw paper, bonnets, and such coarse productions alone, even if newspapers, books and calendered papers were not made, but we believe that even the manufacture of the finer qualities of paper would pay well too.

San Bernardino offers especially good openings for manufacturing enterprises, and the day is not far distant when they will be availed of. The climate renders expensive buildings unnecessary, and fuel, often an item of great expense, is here reduced to a minimum. Work can be continued the whole year and there need be no stoppage on account of freeze-outs or floods. There is a vast market for manufactured articles in the mining country around us on all sides, which manufactures nothing, and in which the greater portion of the goods now used are imported from the East. Water power is here in abundance, and one or two of our mountain streams would furnish ample power to drive all the machinery on the Pacific Coast, and now less idle. Living is cheap, and labor can be had as reasonable as in the East. Taking all these advantages together, there is no reason why manufacturing industries should not pay better than there. It is but a matter of time before all our natural advantages in this respect will be appreciated and manufacturers get a start among us, and once introduced others will follow in rapid succession, while those who come first will fare best.—*San Bernardino Times*.

## SMALL FARMS.

Wherever the small farm has been thoroughly tried it has proved a success. It has been a common error in the minds of the people of California that nothing short of hundreds of acres would pay the farmer. Our valley lands are rich in productive qualities, and by a proper system of farming those qualities might be developed to the end that a good living for a man and family can be obtained from a small farm with a handsome profit besides. In old settled countries, where land is no better adapted to the natural productions than ours, small farms, in many instances less than 40 acres, support large families and show signs of thrift and happiness. Then why can not our valley lands, which are favored with every natural quality and advantage, be utilized and brought into a high state of cultivation, to the delight of our people and the advantage of our fast increasing population. The reason, my large farms are less profitable is very obvious, inasmuch as the proper amount of labor necessary to a high state of cultivation is neglected in the rush to plant in season; the seeding and cultivation of crops being done, not in proper season, but when opportunity (depending upon various natural causes) presents itself. The result of small farming was shown in a statement from a man living near Davisville, Yolo county, and recently published in one of the Sacramento papers. He states that he owns but ten acres of land most of which is planted to fruit trees and vines, with but an acre or two for vegetables. He states that last year he supported his family, a wife and one child, and after carefully footing up his produce receipts, and deducting expenditures, he had about \$800 left as a clear profit, the result of which must be credited to frugality and practical farming. The above is but one instance of the advantage shown to exist in small farms. Our land is well adapted to the culture of fruit and vegetables, and those of our small farmers who have farmed their soil well, practicing industry, economy and frugality, have made a great deal more money, in proportion to money invested and land tilled, than our largest and widely extent our valley land is sufficient to maintain any family and tracts in excess of that amount owned and farmed by our farmers, are detrimental to the development of our agricultural products.—*Sutter County Farmer*.

## GOOD NEWS FOR WINE-MAKERS.

For some years past there has been a law in Iowa prohibiting the shipment into that State of wines and liquors made outside thereof. California being an exporter of wines and brandies, her trade has suffered considerably through the operation of this law, which effectively shut her out of the Iowa market. A telegram was received in Sacramento recently, however, stating that the barrier had been removed; that the Supreme Court of Iowa had declared the law to be unconstitutional, and that Iowa was now open to all persons engaged in the wine and liquor trade. This will be welcome news to the wine-makers of California. It is expected that the export trade will receive a new impetus at once. The Iowans will now have an opportunity of realizing what it is to drink the pure and sparkling juice of the grape—a luxury they have long been denied.—*Sacramento Bee*.



BROAD GAUGE.

## TIME TABLE.

Commencing Monday, Sept. 3, 1883.

And until further notice, Passenger Trains will leave from, and arrive at San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
8:30 A. M.		6:40 A. M.
9:30 A. M.		8:10 A. M.
10:10 A. M.		9:30 A. M.
* 3:30 P. M.	San Mateo, Redwood...	* 10:02 A. M.
4:25 P. M.	... and Menlo Park...	* 3:36 P. M.
* 5:15 P. M.		† 4:50 P. M.
6:50 P. M.		6:00 P. M.
† 11:15 P. M.		7:50 P. M.
		† 8:15 P. M.

8:30 A. M.		9:30 A. M.
10:40 A. M.	Santa Clara, San Jose and...	* 10:02 A. M.
* 3:30 P. M.	Principal Way Stations...	* 3:36 P. M.
4:25 P. M.		† 4:50 P. M.
		† 8:15 P. M.

10:40 A. M.	Gilroy, Pajaro, Castroville,...	* 10:02 A. M.
* 3:30 P. M.	Salinas and Monterey...	* 3:36 P. M.
10:40 A. M.	Hollister and Tres Pinos...	* 10:02 P. M.
* 3:30 P. M.		6:00 P. M.

10:40 A. M.	Watsonville, Camp Goodall,...	* 10:02 A. M.
* 3:30 P. M.	Aptos, New Brighton,...	* 3:36 P. M.
	Soquel (Camp Capitola) and...	6:00 P. M.
	... Santa Cruz...	

10:40 A. M.	Soledad and Way Stations...	6:00 P. M.
† 7:30 A. M.	Monterey and Santa Cruz...	† 8:43 P. M.
	(Sunday Excursion)...	

\* Sundays excepted. † Sundays only. ‡ Theatre train, Saturdays only.

Stage connections are made with the 10:40 A. M. Train, except Pescadero Stages via San Mateo, and Pacific Coast Stage via Santa Clara, which connect with 8:30 A. M. Train.

SPECIAL ROUND-TRIP TICKETS.—At Reduced Rates—to Pescadero, Monterey, Aptos, Soquel and Santa Cruz; also, to Gilroy, Pajaro and Paso Robles Springs.

EXCURSION TICKETS.—Sundays and Sunday—good to return on Monday to Santa Clara or San Jose, \$2.50; to Gilroy, \$1.00; to Monterey or Santa Cruz, \$2.50, and to principal points between San Francisco and San Jose, also to Gilroy Hot Springs, \$5.00.

SUNDAY EXCURSION TICKETS.—To either Monterey or Santa Cruz, and return, \$3.00.

Ticket Offices.—Passenger Depot, Townsend street and No. 613 Market street, under Grand Hotel.

A. C. BASSETT, Superintendent. H. R. JUDAH, Asst. Pass. & Tkt. Agt.

\* SOUTHERN DIVISIONS.

For points on Southern Divisions and the East, see O. P. R. R. TIME SCHEDULE.

## OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY

## FOR JAPAN AND CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 12 M., YOKOHAMA & HONGKONG

Connecting at Yokohama with Steamers for Shanghai.

Will sail from San Francisco:

COPTIC	... Saturday, May 6th.
ARABIC	... Thursday, June 28th.
OCEANIC	... Tuesday, July 10th.
COPTIC	... Saturday, July 21st.
ARABIC	... Saturday, September 15th.
OCEANIC	... Thursday, September 27th.
COPTIC	... Thursday, October 11th.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cabin plans on exhibition and passage tickets for sale at C. P. R. Co.'s General Offices, Room 74, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 203 Market street, Union Block.

T. H. GOODMAN,

Gen'l Passenger Agent

LELAND STANFORD,

President.

## F. A. HATCH &amp; CO.,

(Members S. F. Produce Exchange.)

## COMMISSION MERCHANTS,

122 CLAY ST., SAN FRANCISCO.

Flour, Grain, Wool, Beans, Dried Fruit, Honey, Etc.

LIBERAL ADVANCES MADE ON CONSIGNMENTS.

—AGENTS FOR—

Healdsburg X X X Flour

—AND—

UNION MILL FLOUR.



## QUICK TIME AND CHEAP FARES

FROM

AUSTRALASIA, CHINA & JAPAN,

TO

NEW YORK

AND

LIVERPOOL.

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

CENTRAL PACIFIC RAILROAD

CONNECTING WITH

Union Pacific Railway

AT OGDEN, UTAH,

AND

SOUTHERN PACIFIC RAILROAD

CONNECTING WITH

Atchison, Topeka and Santa Fe Railroad,

AT DENING, NEW MEXICO,

AND THE

Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

## THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway Lines in the Eastern States, for all the Cities of the

UNITED STATES AND CANADA.

CONNECTING AT

NEW YORK

With the several Steamer Lines to

England, France.

AND ALL EUROPEAN PORTS.

Silver Palace Sleeping Coaches,

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience to the Passenger while en route—combining the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable coaches, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Travelers.

Children under Twelve years of age, Half Fare Under Five years of age, Free. 100 pounds of Baggage per full Passenger free. 50 pounds of Baggage per half Passenger, free.

## PRINCIPAL TICKET OFFICE

AT THE

OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

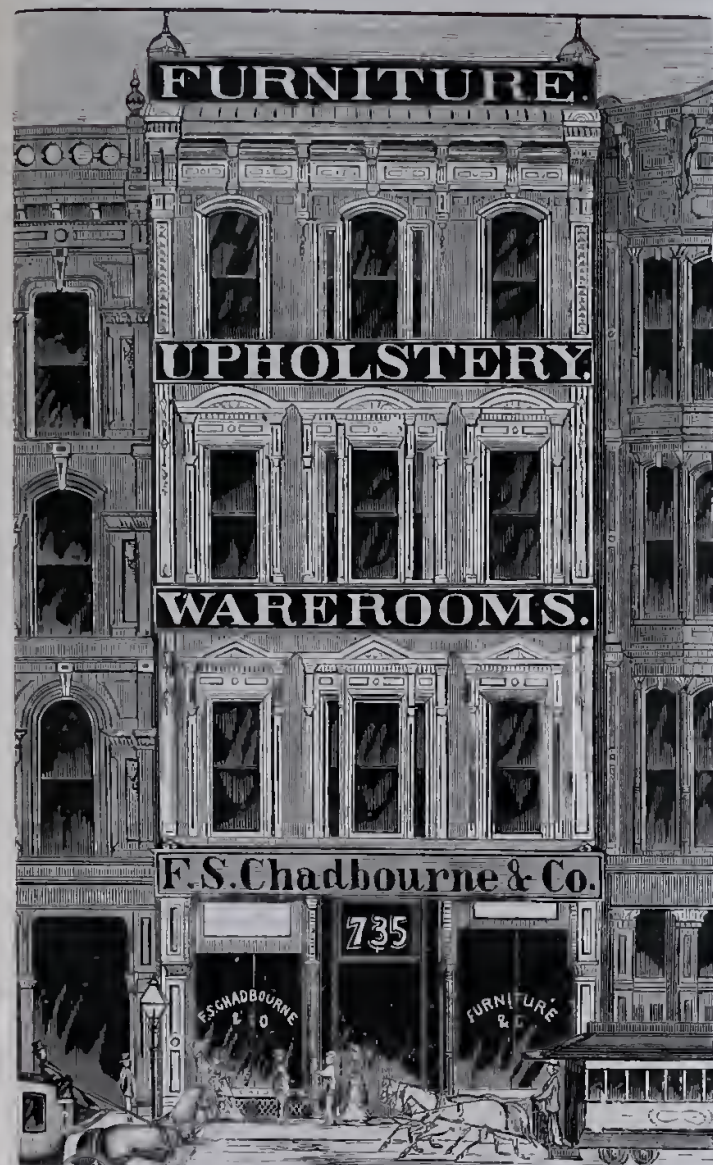
Where passengers, calling in person, can secure choice of routes and sleeping-car accommodations.

A. N. TOWNE, Gen. Superintendent. T. H. GOODMAN, Gen. Pass. & Ticket Agt. SAN FRANCISCO, CAL.



F. S. CHADBOURNE &amp; CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



IMPORTERS, MANUFACTURERS,

—AND—

Wholesale and Retail Dealers in

FURNITURE AND BEDDING

OF EVERY DESCRIPTION.

Chamber, Parlor, Library and Dining  
Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish

Easy and Lounging Chairs, Etc.—Hotels and Private

Residences Furnished.—Designs Furnished

and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND VAN HILL STREETS, PORTLAND, OREGON

## INVITING TO NEW HOMES.

We take the following from the *Chicago Farmer*, which is the first of a series of articles to be contributed by L. N. Hog, recently sent by the Pacific Railroad Company as a Commissioner of Immigration, whose headquarters will be in that city.

I have been a reader of your very valuable paper for over twenty years. I have some knowledge of its history—its eventful career, its usefulness and its success. I admire its uniform candor and conservative mode of conveying information, as well as its energy and enterprise in collecting such information relative to all the industries of the country.

Your age and great circulation have divested you of all local prejudice, and made you a truly national agricultural journal. For these reasons I hold in high appreciation your offer to become the medium through which I may talk to your many readers in regard to my adopted State, California. In these communications I shall indulge in no fancy pictures of the many and wonderful natural scenes of beauty and grandeur and sublimity so frequent in California, nor shall I overdraw, by an attempt at word-painting, any of the splendid and truly magnificent estates that have been created there by human energy, judgment and good taste. On the other hand, I shall, in plain farmer language, endeavor to give your readers a good and truthful understanding of what California is naturally, and what she has already been made by settlement and cultivation, and what she is capable of becoming by an increase of her industrial population and an extension of the cultivation of her soil and the conversion of her broad domain into industrial and happy homes.

Perhaps but few have an idea, or a correct knowledge of the size or immense area of the State. Let me state, then, that California is 770 miles in length, being bounded its entire length on the west by the Pacific ocean. Its greatest width is 330 miles, and it contains 168,361 square miles, or 120,947,840 square acres of land.

Compared to other States of the Union, it is four times the size of New York; it is twenty-four times as large as Massachusetts, it is 111 times as large as Rhode Island.

Compared to European countries, it is four-fifths the size of Austria, and lacks but a fraction of equaling the whole area of France. It is nearly twice the size of Italy, and is one-half times greater than the whole British Isles constituting Great Britain. California contains 69,069,000 acres of land suited to cultivation and profitable agricultural pursuits.

The population of California in 1880—the last census year—including Indians on reservations, but excluding Chinese and Japanese, was 789,617.

With one-fourth the territory, New York had a population of 5,000,000, or over six times the population of California.

With one twenty-fourth the territory, Massachusetts had a population of 1,500,000, or nearly twice the population of California.

With the same territory, France has a population of 36,000,000, or forty times the population of California. When it is stated that acre for acre, or square mile for square mile, the whole area of California is capable of sustaining a larger number of people than New York or Massachusetts, and an equal or greater number than France, it will be seen that there is still some room for people to settle and make homes in California.

## GRAPE GROWING.

The following article, taken from the agricultural department of the *Weekly Bulletin* of this city, will be of interest to the grape grower of this State:

The viticultural interests of California are yet in their infancy. The experimental stage has just been passed, and grape and wine growing can now be said to have entered upon its stage of development. Already, while viticulture has been hardly more than an experiment, it has added a vast sum to the wealth of the State, the value of its products this year being estimated at \$10,000,000. The grape, wine and raisin interests of the State will, it is anticipated, be even of greater comparative importance than they are now. An idea of the importance of these interests can be gathered from the following interview with R. B. Blowers, of Yolo county:

Mr. Blowers said he had 70 acres of land, 50 of which are in raisin grapes; his vineyard is fifteen years old last spring; thinks the fifteen year old vines as a whole produce more than the younger ones, although some of the younger vines, those that are five or six years old, yield as much as the older vines. He has made as many as 250 boxes of raisins from an acre of grapes; average good raisins are worth from \$2 to \$2.50 at wholesale rates; that has been the average price for the past five years. Of shipping grapes the yield will average ten tons to the acre and four tons per acre of wine grapes. Table grapes bring \$40 per ton; wine grapes from \$30 to \$30 per ton.

In answer to the question, how many years is required to bring a vineyard into profitable bearing, Mr. Blowers said: That depends upon who has the vineyard. If it is handled with judgment and skill the third year ought to pay well for that year, and also the second year's expenses. For instance, I have a small patch of seedling Sultanas three years old. I got five tons for the third year, ten tons for the fourth year, twelve tons for the fifth year, and seventeen tons for the sixth year.

He was asked about a market for our increasing grape crop. He said: People will eat raisins and will drink wine. This is one of the principal industries in France and Spain, and it can be carried on more extensively in California. There are only about two million boxes of raisins annually imported into the United States. We have made only about 150,000 boxes of raisins in our best year; so you see California cuts but a small figure in the supply of the United States. But a small percent of the raisins used in the United States is produced in California. If grapes should become unprofitable for raisins we can feed them to our pork, and then raisins will soon be in demand again. Grapes will fatten pork faster than any known food.

In answer to the question, what is an average vineyard considered worth when in bearing say for five or six years, Mr. Blowers said: There are vineyards you could not buy for \$500 per acre. I have a neighbor who has five acres. He has made as high as \$1,000 clear profit from the five acres, and, hired all his work done.

## AN IMMENSE IRRIGATION CANAL.

One of the most important enterprises ever undertaken in San Joaquin valley is now rapidly approaching successful completion in Merced county. In speaking of it the *Stockton Herald* says:

The grand results to be obtained by conducting the surplus waters of the rivers out upon the arid plains for irrigating purposes are no longer matters of doubt, as there are numerous localities where the almost instantaneous changes wrought by such enterprises afford convincing proof of the great value of water as a fertilizing element. Merced county contains a large area of land and which produces large crops of wheat in favorable seasons, but its liability to severe droughts has rendered its tillage a precarious occupation. Thorough and systematic tillage has enabled some of the farmers of that section to raise fair crops of wheat with a moderate rainfall yet it has been found that, although the land is of superior quality, the climatic conditions constitute a serious drawback to farming success.

In order to guard against the effect of drought, it is proposed to construct a canal six feet in width on the bottom to conduct the waters of the Merced river over the plains, and thence by branch ditches distribute it over the surface of the most productive lands of the county. The practicality and importance of the enterprise have been known and fully understood for several years, and an organization of farmers constructed a canal of limited capacity a number of years ago, from which considerable land was irrigated. The capacity of that canal was insufficient to meet the wants of that locality, and owing to the character of the earth to be excavated to enlarge the canal, the requisite enlargement was found to be too expensive for the original company to carry out, consequently the original company sold its franchise to a company of which C. H. Hoffman is one of the principal stockholders. The new company have both the capital and the pluck to enlarge the canal, and several hundred men are now employed on the work, and more will be engaged as the surveys are completed and the line of the main extension established.

The water will be taken from the Merced river at a point about two and a half miles above Snellings and carried along the south bank of the river several miles, and then the main line will pursue a southerly course, passing to the east of the town of Merced at a sufficient elevation to afford a supply of water to all the plains from the river to a point south of the town, embracing an area of at least one hundred thousand acres of excellent land suitable for the growth of an almost unlimited variety of products. The Merced river has its source in the higher Sierras, where it receives its supplies from the melting snow on the lofty peaks overlooking the Yosemite valley, consequently it is less affected by summer droughts than are several other tributaries of the San Joaquin not draining regions of perpetual snow. The Merced river generally carries a large volume of water until late in the season. For this reason the probability of the development of the magnificent tract of land upon which it is now proposed to conduct and distribute the water of this river, are largely increased, and the importance of the scheme can hardly be over-estimated. Through a well arranged system of irrigation the variety of the products of Merced county will be increased almost indefinitely, the large wheat farms will be divided into small tracts, upon each of which permanent homes will be established and a large district of country become suddenly transformed from an unpeopled solitude to a scene of active, prosperous life. The work of transformation is already begun. The price of land has advanced at least 50 per cent throughout the whole region of country since the fact was made public that men of means and energy had taken hold of the work of constructing the canal. Men, who were a few months ago dependent and desirous of seeking homes in other localities, are now hopeful and confident of the future of Merced.

## INDIAN RECORDS.

The following is from the *Plumas National*. A mile or so from the celebrated Four Hills mine, near Eureka, is a very large cropping of iron ore, which belongs to the Mohavah Company, and in one place the ore, nearly pure, crops out some 30 feet high. It is soft and easily cut, and from appearances has been used for many generations by the Indians as a record book of passing events and a means of communication. It is covered with rude pictures of animals, deer, bear, etc., and now and then men and dog figures extensively in the "map." Hieroglyphics, which are, of course, totally unintelligible, cover large portions of the croppings, and mixed with these can be found names of prospectors who left their mark twenty years or more ago. It is an interesting place, and, our informant says, is well worth a trip up there too.

## AN IMPORTANT MINING COUNTY.

The *Sierra Tribune* says "that Sierra county is yet destined to become the first mining county in the State. There are more extensive ranges of unprospected territory than in any other county. The county is capable of supporting a population ten times greater than it does at this time. The mountains for miles around us are belted, by every practical miner, to contain the blue lead—as rich and perhaps richer than any of the valuable claims that have already been opened out in the past. There is a perfect network of gold-bearing ledges ranging through the country that have not begun to be prospected yet. All that is needed in develop our resources and make these mountains yield up their golden ore is a little capital. The mining prospect in Sierra county was never as good as at present."





MANIFEST DESTINY.



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, NOVEMBER, 1883.

ESTABLISHED, 1870.  
Office—320 Sanson St., Huleck Building.

Entered at the P. O. San Francisco.

\$2 PER ANNUM.

Six Months, \$1.25.—Postage Paid.

SINGLE COPIES, 20 CENTS.

ISSUED MONTHLY.

San Bernardino at this date, as old wagons and parts of machinery are still scattered about. San Bernardino is the largest county in the State, covering an area of 16,000 square miles.

There are many industries followed in this county, agriculture ranging first, pastoral and mining coming next. The mining interest threatens to depose the leadership, as the latter is growing in importance.

There are many beautiful and productive valleys among which are San Bernardino the largest, old San Bernardino, Rincon, Los Sierras, Yacopa, Juniper, Chino, Jurupa, and San Geronimo. San Bernardino is the principal valley in the county being from

ket among the settlers from the East, as they so much resemble their home apple. Potatoes are a good production and are in demand. Many lumber-mills are to be found in the mountain section as it is heavily timbered. The mills average 10,000,000 feet of lumber annually, which find markets in the mining region and in the lowlands.

## Honey Making.

Prominent among the minor industries is the pleasant out-door pursuit of honey making. The fragrant varieties of flowers and their exceedingly spicy flavor especially from the aromatic sage which blossoms so recklessly upon the deserts; the honey is said to have a delicious taste, much re-

back into the hive for the patient, robbed bees to fill again. The receiving can holds 1,500 lbs, and two men can fill it in one day. A single comb is so quickly drained that a bee might leave the hive on a foraging expedition and before she could get her little load of honey, and return, the comb could be emptied and put back into the hive.

A still more tyrannical circumvention has been devised to get extra rations of honey from the bees; false combs, wonderful imitation of real ones, are made of wax. Apparently the bees know no difference; at any rate they fill the counterfeit with honey. These artificial combs, carefully handled last ten or twelve years in continual use. However, as someone has said: "The bee business is a good



CASCADES IN ETIWANDA CANYON. SAN BERNARDINO COUNTY, CAL.

## SAN BERNARDINO COUNTY.

Location—Area—Soil—Climate—Resources, Etc.

Honey Making—Mines and Mining—Manufacturing Capabilities.

City of San Bernardino, Riverside and Culture Described.

[By the Traveling Agent of THE REMOVING.]

San Bernardino county is bounded on the north by Inyo and the State of Nevada, on the east by the Colorado river, on the south by San Diego county, and on the west by the counties of Kern and Los Angeles. Originally it was part of Los Angeles county and was named from the old mission of San Bernardino by a Mexican, who owned the whole magnificent valley under a grant. He cultivated small portions of land by means of Indian labor and the hills were covered with herds of cattle and horses, this county being well adapted to this industry. However, in 1851, it was purchased by two gentlemen, Messrs. Rich and Hanks, who were acting in the interests of a colony of Mormons who were sent out here to establish a foothold in California, and had back the wandering sheep into the fold. Belies of these Mormons are to be seen in

40 to 50 miles in length, and 22 miles in width. Here are located Riverside and San Bernardino towns, the principal ones south of Los Angeles.

The valley of San Bernardino lies southwest of the center of the county, and northwest of San Bernardino mountain—made beautiful in winter by being snow capped. It is forty miles from the town of San Bernardino. The mountains are covered with spruce, pine, hemlock, cedar, balsam and oak, whose tops seem to pierce the skies. San Bernardino mountain is nearly 12,000 feet in height. Numerous streams flow from the mountain fringed by heavy growths of willow and sycamore. The Santa Ana river flows the entire length, making this the favored locality by its fine water privileges. In some streams, flowing through the various canyons, rich placers are to be found, one of which, Lytle creek, has been worked more or less for years.

Productions are greatly diversified, but the orange, grape, fig and olive bring the surest returns, and it was proven long ago, that many parts of the county are well adapted to silk culture. Fruits are now so rich and plentiful that several dryers and canneries have been established in different parts of the county, with a promise of increased business as time passes. The fruits grown in the mountain districts are very fine, apples, etc., finding a good mar-

sembling that of the famous honey of Hymettus.

The yield is quite satisfactory as some years the product is better than others. In a gross estimate of the southern counties the return last year was given as three million pounds; a statistic that would, no doubt, seem surprising to General Fremont, who, in his report to Congress in 1844, of explorations on the Pacific Coast, stated that the honey bees could not exist west of the Sierra Nevada mountains.

Bee ranches are always picturesque, as they are usually in canyons or in wooded foot-hills, and their collection of tiny, bright-colored hives look like gay lilliputian encampments. The hives are usually set in the form of a hollow-square, which makes the care of them much easier. On one side of the dwelling houses one often notices an observation hive with glass sides, which is quite an addition where the habits of bees are to be studied to advantage. In some cases honey-strainers are utilized; this is a marvelous invention which would drive the bees wild with despair if they could understand it. In a wheel with perforated spokes, is slipped a comb full of honey, the cells first being opened with a hot knife. By turning this wheel swiftly the honey flows out of the comb and pours through a cylinder into a can underneath, leaving the comb whole and unharmed, ready to be put

business only for a man who has a gift of continuance." There are great drawbacks to this industry; the irregularity of the flowers being chief; some years no honey at all is to be found in the flowers. Some explain this by one hypothesis, and some by another, and it serves them to quarrel over. This difficulty does not occur often, and the bees find some flowers for work all the months in the year. According to some statistics the highest yield is 180 pounds a hive. The time of greatest danger is when the apricots are ripe and lady-bugs fly. Bees will eat till they are drunk or starved to death. They do not live to get home. Oddly enough the bees cannot pierce the skins of the fruit themselves, but wait till the lady-bug makes a hole for them and then they disappear.

No one need think the bee business all play, for it is like everything else in life, and harder than some things. This interesting work is followed with great success by ladies who find it especially fitted to them on account of the light work and of being in the open air. It pays better than house work or school teaching and is a thoroughly independent business. This is a remunerative occupation to a wonderful extent, and as the honey is pure and of such good flavor and superior quality it is sent to northern markets, where it finds a ready sale at good figures.



**Mines and Mining.**

There are tin mines here which are but little developed, as they are in litigation. They are located in the Temescal mountains, a spur of the Coast Range. The Calico mines are in the north-eastern part of the county, in an isolated, uninviting location, but are profitable for miners. It has the brightest outlook of any camp since the early times of the Comstock. There are over 150 mines in operation and paying well. There is a list, made out by H. B. Stevens, of some of the mines of the Calico district: Bonanza King, Mosson, Sue, Red Cloud, Prentiss, His Mark, Humbug, Occidental Group, Turpin, Red and Sievers, Eschscholtz, Dragon, Nos. 1 and 2, Robert Garfield, Invincible, Veto, Nonpareil, Snow Bird, Four Aces, Taggart, Blackfoot, Silvereta, Last Chance, Silver Roof, Last Fracture and others. These mines are in active operation and extracting rich ore.

At Calico there are to be found good accommodations. At Dagget's, the railroad station, a four-horse stage meets all trains and conveys passengers to Calico, a distance of seven miles. Mr. McCham, the driver, is very careful and obliging. The fare is \$1.00 each way.

There are three restaurants. Bledell & Warshaw keep the Globe, located on Calico street. They charge fifty cents for single meals, or \$7.00 per week for board. Meals are furnished at all hours of the day and night.

The Cosmopolitan hotel is kept by Wm. N. Turpin. He has a fine hotel, erected at a cost of \$3,000, having accommodations for 30 people, and, as there is a restaurant in connection with the house, meals are served at all hours.

The Railroad hotel is the second. V. Van Bricom & Co. are proprietors. Lunches are put up for passengers, who are always well treated here.

J. F. Davis is a druggist and pharmacist at Calico, and is an excellent business man.

outings, widely scattered, still remain; thus adding another chapter to the history of the early days of the great gold excitement.

**Land.**

The best land in the county is located between the San Bernardino range and Los Angeles. Here the soil is exceedingly fertile, and contains nearly all the agricultural land in the county as well as the towns and villages. Orchards are increasing in number, as the soil is well adapted to the cultivation of olive, orange, pear, apricot, fig and peach trees.

What is needed in this lower country are more laboring classes, as well as capital, for there is plenty of land which, with irrigation and good cultivation, will blossom and bear equal to any land known, and the capitalist can find abundant scope for his resources.

**Manufacturing.**

Is another interest which, in time, will be an important enterprise; for the county has superior manufacturing facilities in water power, climate and location. On the desert the yucca furnishes unlimited material for the paper maker, which is taken no further advantage of than to be reduced to pulp, in small quantities, and shipped away to be manufactured, and sent back, afterwards, in its perfect state. This should not be while there are such vast quantities of paper material that could be utilized were there mills to use them; and there is a large field to which a mill could look for a market. There is money in wrapping paper, straw paper, boards and such coarse productions alone, even if newspaper, book and calendered papers were not made; but the manufacture of the finer qualities would pay well, too.

**Climate.**

For people suffering from pulmonary troubles climate is unsurpassed. The high altitude—

years, are about \$45 per acre, including cost of cuttings, etc. The income in older vineyards is about \$80 per acre, while the returns from an acre of orange trees, in full bearing, are much in excess of these figures.

Riverside is near the Santa Ana river, and is filled with cosy homes and pretty streets, bordered and shaded by pepper and evergreen trees; the drive to Arlington, an aristocratic suburb, is especially beautiful on account of Magnolia avenue comprising its triple row of trees and excellent roads. There are, at intervals, magnolia, from which the avenue takes its name, grinchia robusta, evergreens, palms, etc. Beautiful homes and orange orchards border the road for miles, some of them not more than twenty acres, often not that much, and sometimes many times that amount. These farms will give handsome incomes, when they once come into bearing, as the land is especially fertile, which shows itself in gratifying harvests. The people all take pride in their delicious fruit, and tell one with confidence that their trees are free from insect pests. They have established so close a quarantine upon outside fruit and fruit boxes, endeavoring to destroy the first and furtivating the latter, that they may justly be proud of the result. The Citrus Fair held in Riverside, in 1892, was an excellent example of what a six-year colony has accomplished by unceasing labor. The exhibit was in a pretty little red-wood building, and was literally overflowing with fruit of their growing—oranges, lemons, limes, figs, raisins, citron—in raw state and preserved, orange marmalade poured into halves of orange skins, looking especially tempting and delicious. The second prize for raisins was awarded Mr. Caldwell, who certainly deserved it. The rich coloring and arrangement of fruits, flowers, etc., made a bright scene never to be forgotten, as well as establish-

Samuel Rolfe is also a dealer in lumber, working on a commission basis. He is located on the corner of Fourth and E streets.

W. B. Wiggins is a wide-awake cash grocer. He deals in the choicest of groceries and provisions, and endeavors to give satisfaction in all cases. His store is on Third street, next door to the Farmer's bank.

L. Anchor has a fine store building, called the Anchor block, at the corner of Third and D streets. He deals extensively in dry goods and clothing, fancy goods, hats, boots and shoes. Good merchants are always attending strictly to business, and success is the result, as is evidenced by this gentleman.

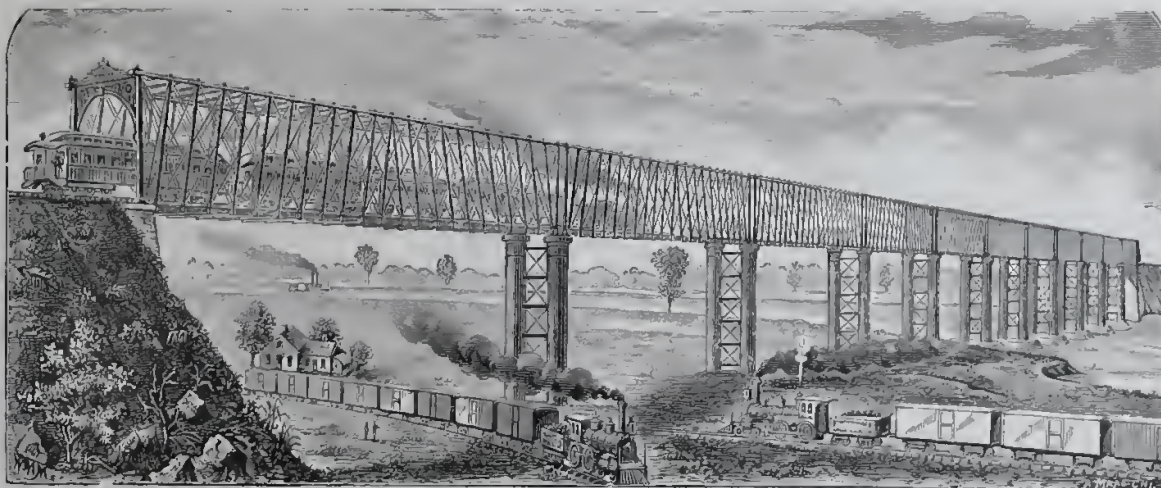
Raffler & Bays are dealers in stoves, hardware, tin, copper, sheet iron ware, mills, carpenter's tools, pumps and all that pertain to a first class establishment of the kind. This firm are doing a good business on third street.

A. W. Barnum is a dealer in stationery, confectionery, school supplies and newspapers. He receives subscriptions for all leading papers, and is agent for the Resources of California. His store is connected with the post-office in San Bernardino.

The Farmers' Exchange bank is a reliable and long tried institution, of which the following well known gentlemen are some of its directors: J. H. Stewart, Byron Waters, also M. Byrne, J. M. Waters, etc. Its capital is \$100,000 and it receives deposits, pays full value for bullion and gold dust, and loans money on property.

**Hotels.**

Starke's Hotel is the best in the town, being on the corner of Third and C streets. Everything is first class, it is a new brick, newly and nicely furnished, with telephonic connections with the entire



UNION PACIFIC RAILROAD BRIDGE, ACROSS THE MISSOURI, AT OMAHA.

**Other Mines.**

Silver King is excellent mining property, and, by some, is considered the best, being further developed. It is tapped by a tunnel 160 feet from the surface; at this point the vein is four feet wide, assaying from \$200 to \$1,800. Drifts have been run east and west on the vein, and shafts are being sunk from them. Supplies for these mines have to be brought from San Bernardino, 90 miles distant. Oftentimes mules are packed with small supplies and sent through Cajon Pass.

Mines at Providence mountain are owned by Eastern capitalists. There are volcanic mountains all about and lava beds are common. Here the Mojave river is utilized in mining, which is an advantage not possessed by some other mines.

The Cajon coal mine is rich in deposits of bituminous coal which, when brought into use, will be invaluable in mill working where wood is scarce.

**Death Valley.**

The history of this spot is well known to most people, as much has already been written and said about it. The location is on a perfectly barren, sandy desert, utterly devoid of water. It is 250 feet below the sea level, and is thought to be the bed of an ancient ocean, as is believed of the Colorado desert. Many people, coming to this State in early days, lost their lives; but the story of one party seems to be especially sad: There were many young and old men in a train who were eager to reach the gold fields, so they separated from their company and, thinking to make a short cut, wandered in this valley in search of water. Many days of wandering over the hot, dry sand failed to bring them any nearer the priceless water, and, day after day, the sun glared down pitilessly, making wonderful mirages of groves of trees. In vain they searched for water, and falling, one by one, suffering untold agonies. The remains of the bones of the party, as well as those of their wagons and

900 feet—gives it especial features of dryness and salubrity hard to be equalled. Of course, change is apt to benefit people, but the relation of climate to pulmonary affections presents its most important aspects; for people, in other parts of the world, suffering from tubercular disease in its established stages, this county affords a prospect of relief and benefit, oftentimes a cure. It is true that consumption may be developed here as in most other parts of the temperate zone. The ocean breezes brace the system against debility, and often enable it to resist disease, while many people adjourn to the mountains, near by, where charming summer resorts are to be found, thereby mitigating the injurious results which might sometimes come from the heat of summer.

**Churches and Schools.**

There are excellent schools in the county; there are some 40 districts. The teachers are under the supervision of John A. Rousseau, a thorough scholar. The teachers are of first quality, many graduates of our noted State Normal School being employed.

Churches are well represented; they and the school-houses go hand-in-hand. The churches are quite well patronized, thus keeping good the tone of society, which is constantly improving. There are many settlers from the East, and in Riverside one would think himself among his own friends, as there are so many specimens of the finest class of Yankees, who find the halmy winters of San Bernardino county much to be preferred to those of the Atlantic Coast.

**Riverside.**

Land can be bought at prices varying in accordance with the amount of cultivation in this delightful locality. The sales in January and February, for 1892 alone, amounted to 212,217 acres, and good land is in demand all over the county.

The cost of a vineyard, during the first three

listing for the young settlement a reputation for energy, enterprise and public spirit.

The St. George hotel is a first-class house, and the furniture being new and neat. Their terms are moderate, and tourists, etc., would do well to call here before going elsewhere. The cuisine is excellent and embraces all the market affords. Mr. John Boyd is the landlord.

The Glenwood is a delightful home for the weary traveler, and Miss Miller is especially attentive to their guests, who always carry away pleasant memories of her kindness and capabilities.

To those contemplating a trip to Arrow Head, a delightful retreat in the mountains, where hot springs and extensive views are the order of the day, one would do well to patronize the City livery stable for good horses and buggies. There one will find Mr. Dickson, who is ready to suit his patrons.

**San Bernardino.**

Is reached by a stage running from Colton to the town, a distance of three miles. The town is pleasantly located, and supplies the mines with provisions.

Mr. S. C. Kendall has specimens from every mine in the county. He is a lively and enterprising real estate and mining agent.

A. D. Boven is another dealer in lands and mines, and well deserves patronage, as he is the right one in the right place.

W. S. La Prax is the owner of saw mills in Little Bear valley, the mills having a capacity of 20,000 feet per day. The supply is pine, hemlock, red and white cedar, and seems unlimited. The yearly out of the mills on the mountain is about 6,000,000 feet, and is all consumed in the county, being sold for \$22.50 to \$25 per thousand feet, which is \$10 per thousand less than redwood. A number of the same grade can be bought for. Mr. La Prax's office and yard are at the corner of Fourth and E street.

county, has a good reading room with full files of newspapers.

The European hotel is also a new brick, newly refitted having recently changed hands. All stages pass the door, and call or leave passengers. H. L. Martin is the proprietor. There is a fine billiard room and telephonic connections. Meals 25 cents.

**Colton.**

Is where people bound for Riverside and San Bernardino leave the cars. It is not a pretty town, as it is located on a sandy plain, where the wind makes it fly occasionally to one's great disadvantage. It contains 600 or 700 inhabitants and is growing steadily, as there is good land surrounding it. There is a fine new hotel here where the traveler will find excellent meals and a good landlord. Meals are reasonable and of the best quality. This hotel is situated opposite the depot convenient for passengers, and others. Mr. Hodges, the proprietor, was formerly of the Luck House, San Francisco, and of the Metropolitan, New York city, and he shows that he understands hotel keeping.

Wm. G. Hughes is a cash dealer in groceries and provisions, and is doing a good business, that is constantly improving. In the new brick block in Colton will be found a splendid store carrying nearly everything a housewife needs, as groceries, crockery and glassware, hats, caps, fancy goods and dry goods. Here Mr. Frank Eneman gives the best value for the least money, which all know is what is wanted when buying goods.

The class of men and women coming to this section of California is something to boast of and augurs well for the future of the State, which is yet only in its infancy.

**GOOD YIELD.**

It is said that in Vallejo township, Sonoma county, the farmers have averaged 30 bushels of wheat to the acre, a larger yield than was anticipated.



## SANTA CRUZ COUNTY.

Location—Productions—Soil—Advantages, Etc.

Santa Cruz City, Big Trees and Beautiful Scenery Described.

[By the Traveling Agent of THE RESOURCES.]

Of all the counties in this wonderful State Santa Cruz is one of the most desirable in nearly all respects. Tourists and health-seekers are made happy, for in the forests of the mountains are spots which are the scene of loveliness and exhilaration, and where fishing, hunting and botanizing abound.

These localities are reached by means of the narrow-gauge railroad, or South Pacific Railroad; by broad-gauge, or Southern Pacific Railroad, and by steamer. The first is preferred, by some, as it carries travelers through some of the loveliest scenery imaginable. To be in a desirable position in a coach, enabling one to obtain a panoramic view of gigantic redwoods, pretty little mountain homes, of streams prolific in trout, gives a fairly accurate idea of what may be in store for those who seek for pleasure.

Felton is on the line of the narrow-gauge railroad, and has a comfortable hotel and many points of interest in the surrounding scenery. Next is Big Tree station, where hotel, dancing stand, romantic walks and fine views of San Lorenzo river are to be found. The hotel is in charge of a gentle-

tation to live according to the flesh. The climate is certainly not favorable to asceticism. There is a breadth and intensity of light and color here; the flowers blossom recklessly all the year round. The high, windy plain, which sweeps across from the first low range of hills to the ragged brink of the cliffs, has been compared to the English downs. The lines of the landscape are broad and simple. The terraces of the town, the first low range of hills, the dark, smoky, blue mountains beyond, rise and gradually step back with stretches of plain between, like the circling seats of an amphitheatre, from the broad bright arena of the bay—the bay of Monterey—10 miles wide, into whose barriers the ocean pours its winter tides, lashed by the mild "southerly-easters."

The earliest voyagers along this coast seemed to have noted the mountains, especially from the fact of their being heavily timbered. Cabrillo first speaks of these "wooded mountains," and Viscayo "exploring the coast more carefully in the search of harbors" anchored in this noble bay, and gave it the name of this patron saint. Viscayo in his good report of the country had spoken of an infinite number of very large pines, "straight, smooth, fit for masts and yards; likewise oaks, thorns, firs, willows and poplars; large, clear lakes and fine pastures and arable lands." Father Crespi prophesies with a keen temporal eye: "This place is not only fit for a town but for a city, without wanting any of the things necessary; with good land, water, pasturage, wood and timber, within

feel perfectly at home. The accommodations are complete for 70 guests; and in the pleasant parlor and sitting rooms games of all kinds are at hand. Mrs. Lewis is one of the survivors of the Donner party, being the Miss Pattie Reed who is mentioned as having endured so much suffering at Donner lake in the winter of 1846-7.

The Douglas house is the only hotel on the beach that is open the year round. It has recently been thoroughly renovated and newly furnished. This house is to be found on the hill overlooking the bay, where a full view of beach and bathers is to be obtained. This is an especially desirable home, as the parlor is large and each room has a fine outlook on the beautiful bay and the picturesque blue hills of the surrounding vicinity.

The Watkins house is one of the best hotels in Santa Cruz, situated as it is in the center of the town, on Pacific avenue. Mr. P. V. Watkins, the proprietor, is solicitous for the comfort of his guests, and he is noted for his kindness. The table is excellent and attendants of the best, as a short visit will amply testify. Mr. Watkins has several fine cows, which supply the table with rich cream and milk. In connection with the hotel is a large assembly room, containing piano and billiard tables for the benefit of the guests. Besides this the hotel parlor is on the first floor, and is well lighted and warmed.

Bliss' Ocean Villa is beautifully located on the east side of town, at the mouth of San Lorenzo river and overlooking the town. This is a desir-

able natural bridge and numerous hollows worn in solid rocks by action of the sea. Another natural bridge, more isolated, if possible, is located four miles from Santa Cruz. Then there is Aptos and Soquel for other drives well worth taking, as well as numerous mountain and coast trips.

## Land.

The land is especially fertile and well adapted to fruit and vegetable raising. No irrigation being necessary, these are remunerative. Hillside farms are quite productive, as the following reports, taken from official returns for the fiscal year ending in 1880, will show: wheat, 211,592 bushels; barley, 90,917 bushels; oats, 10,724 bushels; rye, 63 bushels; corn, 19,481 bushels; buckwheat, 273 bushels; beans, 1,069 bushels; potatoes, 3,127 tons; hay, 1,244 tons; hops, 38,750 lbs.; sugar beets, 216 tons; butter, 55,988 lbs.; cheese, 16,610 lbs.; fruit crop, \$116,250; wine, 34,300 gallons; beer, 546,270 gallons. [The report for 1882 has not been issued.]

—Ed.] The number of summer visitors who frequent this section enable the owners of small, well tilted farms to dispose of their produce in home markets. This variety of productions secures better returns. No man should expect to make a farm productive without labor and skill, here, any more than elsewhere; but where nature has brought together so many advantages, little remains to be done beyond the ordinary labor of good cultivation. Dairying is an interest especially adapted to this county and most excellent butter and cheese are made here.



SCENE ON SAN LORENZO RIVER, SANTA CRUZ COUNTY, CAL.

man who does all in his power to enhance the pleasure and comfort of his guests. The trees are a wonderful but not a secondary consideration, as the remains of General Fremont's old tan vats, which were cut from a large redwood tree, are yet to be seen, although fast falling into decay. There are fine swings for the enjoyment of the happy-hearted children who congregate in this delightful spot. A picturesque foot-bridge spans the San Lorenzo river, just back of the tan vats, and one crossing it may look into the pellucid depths of water to the gravelly bottom. In driving from Santa Cruz city to this point the river is forded, thus diversifying the trip by encountering so lovely a stream. Many picnic parties meet at these Big Trees, and enjoyment is the order of the day. There are tables which may be utilized by picnickers and for ice cream and lemonade stands. From Big Tree station to Santa Cruz is a short ride, but filled with most exquisite sights of mountain and valley beauties which, on the narrow gauge road, is unsurpassed, as seen after scenes of plantations of magnificent forest trees stretch out before the vision. Soon a snug little valley is seen, which contains a powder manufactory and employes' homes. On a high hill, overlooking these buildings, is the home of the superintendent. This is reached by a winding road, and a trip over it is a delightful one.

## Santa Cruz.

In choosing this site for their mission the old padres had, no doubt, a comfortable belief that the best was none too good for them; or they may have wished to enhance the virtues of abstinence and prayer by surrounding themselves with every temp-

reach, in abundance and close to Monterey Bay." So here they founded the mission of Santa Cruz. They built the old church. Its ruins are now covered and roofed over for protection from the weather by a dreary board sepulcher. But it was not only a question of souls, for they planted trees—1,022 fruit trees—and many vines. Their flocks and herds increased and multiplied; they taught the Indians how to make adobe and the use of such rude tools as were then known. Of the bells belonging to the mission two remain in use, and one large one lies broken and silent in the priest's garden.

The city, in 1882, contained a population of 5,000, and is one of the largest cities in the county. The beach, of beautiful white sand, is well patronized by bathers, and the water is of an exhilarating temperature. There are numerous bath-houses furnishing good accommodations in the way of bathing costumes and dressing rooms. Liebrandt's bath house, on the beach, has the finest surf bathing on the coast, also hot salt-water baths. The attendants are good, and their bathing suits are said to be the best. There is a fine bar connected, containing good liquors, for those who desire to indulge.

On the beach is a delightful place for travelers who want a breath of the sea. It is called Seaside Home and is kept by Mrs. Frank Lewis. This home-like and truly pleasing little house is located on the bluff overlooking the beach and bathing grounds. One who loves to listen to the breakers may be amply gratified here. Mrs. Lewis is a pleasant lady and understands the art of making her guests

able home for the summer, as Mr. Bliss has several cozy cottages to let, besides rooms in the main part of the house. There is a large dining room, separated from the main building, where most delectable meals are daintily served, as everything the market affords is to be found here. The grounds are handsomely laid out, a pretty little fountain and basin, containing gold fish, being found in the center of the yard, near a large wooden swing that is a delight to children. From the windows one may enjoy a grand view of the roaring surf, and by walking to the edge of the grounds, bordering on the river, facilities for boating, bathing and fishing are discovered.

The little city is well supplied with fine stores, among which are Frank Ely's large stock of furniture, bedding, etc.

H. Randall keeps a large supply of boots and shoes. He has been established since 1864, and has the finest store of the kind in Santa Cruz.

Wm. Ely has a flour and feed depot, and has been established since 1879.

Samuel Drennan is a prominent real estate and insurance agent.

Oliver & Foster are wholesale and retail dealers in sawed and split lumber of every description.

As there are delightful drives in all directions from Santa Cruz, one may have recourse to livery stables in order to so enjoy the drives. At the Bonner, fine saddle horses and phaetons are to be had.

Moore's bench, about two and a half miles, is found to be especially noteworthy, on account of

Ballwin's dairy is one quite prominent, as it is a model of neatness and thrift. It is located some distance from Santa Cruz, on the coast road, the cows being pastured on the many surrounding hills.

## Mountain Lands.

Having fine roads, are well timbered, suitable for cabinet and furniture manufacture. Redwood, tan bark and mountain laurel or pepper tree, whose leaves distill camphorated fragrance, are among the most valuable woods. Many finely grained woods for veneering are also found. The land on the foot-hills would make and is being utilized for valuable vineyards and orchards, where fine fruits can be raised without irrigation.

## Geography, Etc.

The western and southwestern sides of Santa Cruz front on the bay of Monterey and Carmelo bay which opens its commerce to the world. It has a sufficiency of good shipping ports. Little streams leave few of its more fertile portions unprovided with accessible outlets to the sea during periods of the year. Its natural advantages allow railroads to be constructed with comparatively easy grades. Low mesa lands border the coast and stretch back to the foot-hills, becoming hilly as the timber land is reached.

## Pajaro Valley.

Is rich in agricultural promise, about twelve miles long by seven in width, and possesses soil of unexampled richness. Twenty years, or more, have not exhausted its fertility, nor lessened its productive-ness, so deep and rich is the soil. As if to further add to its desirableness a railroad runs through it, thus affording swift markets and city prices for the



perishable products of small farms. People are not slow to avail themselves of the advantages thus afforded. Many smaller valleys rich in agricultural promise are to be found in this county. There are besides the agricultural interests, some manufacturing. There are fifteen steam and two water-power saw-mills, which turned out 4,500,000 feet of lumber, and 2,100,000 shingles last year.

The San Lorenzo Flume has a capacity for transporting 60,000,000 feet of lumber per season. It connects the upper San Lorenzo mills and "tie" camps with Felton and the railroads which carries the lumber to the coast.

There are five lime kilns, which manufacture a superior quality of lime, and employ a large force of men.

The Santa Cruz light-house, located on a desolate point of land, is worthy a visit from strangers. The people in charge are willing to show the building and lamp to visitors, and Miss Hook's mineralogical, marine and curiosity cabinets are full of peculiar and wonderful specimens, which she has garnered by exchange and otherwise from all parts of the world.

#### HORTICULTURE AT HEALDSBURG.

The Russian River *Fruit*, in a late issue presents the following interesting facts in relation to fruit raising in the vicinity of Healdsburg:

W. N. Gladden purchased in 1872 some fifty-five acres of land one mile south of town and removed to it in April of that year. The piece consisted of thirty-five acres of good land, ten acres light sandy soil, and ten acres of gravel. At time of purchase there was on the place a two and a half acre orchard, five years old, of various fruits. In 1874 Mr. Gladden planted five hundred peach trees on a light gravelly soil, also two acres of grapes, as an experiment on that kind of land. The result was such as to warrant the planting of all that land in these fruits. This land in bay or grain will not produce \$5 per acre, but in peaches it has yielded \$250, and in grapes \$125 per acre. Mr. Gladden has now his entire place, except four acres, planted in orchards and vineyards. Fifteen acres of orchard and two acres of vineyard are in full bearing. Last year the gross receipts from the farm was nearly \$1,000. For his grapes he realizes the highest market price, they being the earliest grown in this vicinity, and the quality good. He has never had to use sulphur to prevent mildew, and the vines produce bountiful crops and do not make so much wood as on rich, heavy land. He says that along Russian river, hundreds of acres of such land, now considered worthless, can be made profitable by planting in vines. The Russian grape, (Muscat of Alexandria) grown on such land makes as fine a raisin as can be found in the market. This year the fruit crop being light, his place did not yield as much cash as last year, but he has a nursery of fine young trees that will do much toward making up the deficiency. With orchards and vineyards in full bearing, at present prices the gross proceeds of his place could be \$12,000 to \$15,000 per year. His leading fruits are peaches, plums and prunes, yet he has all other kinds raised in the country.

#### RYE HAY—TWO TONS TO THE ACRE WITHOUT IRRIGATION.

We believe that this grain is one of the most promising crops that has been raised in this valley. Thomas West, who lives three miles from Loyalton, close to the base of the mountains, raised this year on red gravel land that did not even grow agavebrush, two tons of rye hay to the acre without irrigation. He says: "It rye will do this on this barren, unpromising land, what will it do on good land and in localities where it can have an even chance with other crops?" The success of those who last Spring sowed rye, opens a vast area for profitable cultivation that has been heretofore considered worthless. There is an abundance of good pasturage all around the valley on the hills, that will be utilized by dairymen, if they can raise rye hay enough on the dry lands to winter their cows, and the experiments of this year seem to prove almost beyond a doubt that this can be done. We hope to see a largely increased acreage of this grain next season. The hay is said to be of a superior quality.—*Sonoma Valley Leader*.

#### WHAT THE STATE NEEDS.

California is an empire of itself. She has a territory larger than two-thirds of the kingdoms which are ruled by crowned heads across the sea, and her resources are greater. California lacks only in population and the development of her ample resources. Her chiefest want at present is manufactures. We have agriculture as the foundation upon which to build our commercial and industrial superstructure; we need manufactures to help us build, to round out, to make symmetrical the great edifice that is to denote our future material greatness. It is the old story of the industries that promotes the prosperity of a State in the largest degree. As it is, California makes no mean showing in respect of her manufactures; but what she is to-day in this regard she is destined to eclipse before many years.—*Los Angeles Mirror*.

#### YOLO COUNTY.

S. M. Norton furnishes the *Call* with the following concerning the products, industries and growth of one of the oldest and most progressive counties in California:

As one of the oldest grain-growing counties in the State, Yolo county justly claims a place in the foremost rank. During its early settlement, stock raising formed the almost exclusive occupation of its people, but as soon as the fertility of the soil became known, the herds and flocks were driven to the remote and unprofitable localities, to give place to the plough and the reaper. The first farming in the county was done by John Gordon, on Cache Creek, in 1815. The soil was found to be very productive, yielding 50 bushels per acre by very little cultivation. At this time oats were a spontaneous production of the soil, and pioneer settlers are very enthusiastic in telling of the luxuriant growth attained by this cereal—it frequently growing as high as a horse's back. The lack of transportation facilities, for many years confined agriculture to only the most fertile lands, a yield less than 40 bushels to the acre being deemed unprofitable, and the writer can remember, no further back than '65, when 75 bushels of wheat per acre was no uncommon yield. It was found that cultivation improved these lands, and to-day we find them very productive, commanding prices from \$30 to \$50 per acre. The foothill lands of Yolo, which for many years were deemed only suitable for stock ranges, are now occupied by hundreds of pleasant homes, and yield from twenty to forty bushels of wheat per acre. The same may be said of the immense valley intervening them and the Coast Range mountains on the west. The soil of this valley is adobe, but improves by cultivation.

The richer land of Yolo, that comprising the central part of the county, is beyond doubt the best to be found in the Sacramento valley. Besides its grain-producing qualities, it is found to be adaptable to all kinds of semi-tropical fruits, and the grape it produces has been pronounced, by a board of inspectors at Paris, to be superior to any production of France. This has led many to turn their attention to grape-growing, and it promises to become a very active industry in the near future. The principal vineyardists of Yolo are R. B. Blosser, G. G. Briggs, N. Wycoff, B. C. Ramsey, J. Y. Dillon and S. P. Pond. These men have been very successful in their enterprises, having secured a European market for their raisins, for which they receive good prices. To advance the industry, some of the real estate dealers of Yolo county have inaugurated colonization schemes, for the purpose of dividing up some of the larger tracts of land and selling them off in small tracts as desired by the purchaser. Chief among these are the Bonnyne tract, under the supervision of G. D. Fiske & Co., and the Wilcox & Farris tract under the control of Covard & Clanton. Both these tracts are situated on Cache Creek. The soil is a rich, sandy loam and is beyond doubt of the most fertile quality, and peculiarly adapted to fruit and vines. These companies have already disposed of similar tracts in like manner, and are doing much to develop the resources of the county.

The irrigation facilities of Yolo are all that could be desired. With the Sacramento river to the north and east, Dutch creek bounding it on the north, and Cache creek, a living stream, passing through the center, there is but a very small portion of the county that can not be made convenient for irrigation. As one result of this advantage, alfalfa fields are made to produce as many as five crops of hay per year, besides furnishing feed for an incredible amount of stock. Lands sown to clover sell at from \$200 to \$300 per acre.

On the east and northeast borders of Yolo county there is a strip of land, embracing several hundred thousand acres, which is almost annually overflowed from the Sacramento river. Several schemes have been inaugurated to reclaim portions of this land, but none have so far proved more than a partial success. Immense sums of money have been expended in building levees to withstand the waters, but in severe winters these embankments have failed to protect the lands. In milder winters, however, the floods have been successfully combated, and the lands have yielded large crops. Chief among the men who have staked their fortunes to reclaim these lands are Hens, Charles F. Reed and A. H. Ross, who have spent several years in the work. Although losing about one crop in three, they have been amply compensated for their efforts, and express confidence that many thousand acres of this land will eventually be reclaimed, thus adding a large territory to the farming district of Yolo county. The prospects of this acquisition are enhanced by one Sir John Keyes, a wealthy Englishman, representing a syndicate with a capital of several million dollars, who has recently purchased 20,000 acres of these lands. He proposes to reclaim them at eleven cents an acre, and has at the present writing, October, 1893, a very large force at work building an immense levee around his possessions. It is estimated that the contemplated work will cost over half a million dollars. The crops on these lands this year were not disturbed by overflow, and produced a yield of 30 bushels of wheat per acre.

Although stock-raising has been practically sup-

planted by farming in this country, yet sheep-raising is still carried on quite extensively in districts where agriculture is impracticable. The Coast Range foothills are devoted exclusively to this industry, and the occupation is still profitable. Hop culture has proved a good paying business on the river lands, the crops often yielding to the producer as high as \$300 per acre.

Experiments in berry culture have demonstrated that almost any variety may be grown here successfully. J. E. Chard of Woodland has two acres in strawberry vines, from which he reaped an immense profit the first season. The berries were very large and of a superior quality. Cotton and silk culture has been successfully experimented with, and might be made a profitable industry.

The railroad and other transportation facilities may be mentioned among the many advantages of Yolo county. The northern branch of the Central Pacific passes through the center of the county, running three trains per day each way, connecting directly with San Francisco and Tehama, while the Clear Lake and Yaca valley road terminates at Madison, a town situated in the western part of the county, twelve miles west of Woodland. The extension of this road to Lake County is a scheme in contemplation. The Sacramento river, which forms the eastern boundary of the county, also affords shipping advantages.

Woodland, the principal town and county seat of Yolo county, is an incorporated town of 3,500 inhabitants, having all the essential requisites of a young city. Its rapid growth within the past few years has been most wonderful, while the stately new buildings and costly, elegant residences testify in unmistakable terms to its prosperity. It now has seven hotels, three of which equal in size and architecture any hotel in the State outside of San Francisco; two banks, one having been established the present year; two complete and distinct systems of water works, gas works, fire department, winery, brewery, flour mill, two cigar factories, one shoe factory, machine shop and foundry, ice works, soda works, eight dry goods and general merchandise houses, six groceries, four halls, two daily and three weekly newspapers and other establishments in keeping with a town of its size. What nature has failed to do to make Woodland a beautiful place has been more than effected by the energy and enterprise of the inhabitants of the town. Its artificial stone pavements, wide level streets and cosy residences are not surpassed by any town in the State. On every side may be noted evidences of wealth and the rivaling pride of the citizens. Woodland boasts of its educational advantages, and well she may. Besides Hesperian college, a well-regulated institution of learning, it has two large schoolhouses, graded schools, and the people have just voted a \$10,000 tax for the erection of still another schoolhouse, to meet an imperative demand, caused by the rapidly-increasing population. The Catholics have commenced raising funds for the establishment of a convent in the place, and the success they are meeting with insures its completion at an early day. A beautiful plot of land adjacent to the town has been purchased for the site and several thousand dollars have been raised for building the school and other requisites. There are six churches in the town, representing as many denominations, and another in course of construction. The town authorities have granted a franchise for a street railway, but it will probably be some time before it is constructed.

Woodland is steadily improving, and every improvement is made with a view to permanence. Located in one of the finest farming sections in the State, and having a vast amount of wealth in its midst, little fear is manifested for its future. Its population is made up to a great extent of wealthy farmers who, having retired from the active pursuits of farming, have located in the town to make it their permanent home and give their children a thorough education. They invest their money in town enterprises and use their energies to build up and protect the best interests of the place. The whole people are made men and never refuse to encourage any new enterprise that presents itself.

There has been a steady increase in the price of land in this county, but of late years the increase has been more notably in the vicinity of Woodland, where it now sells for as much as \$300 per acre. When sown to alfalfa it commands a much greater price. Woodland town property is also steadily on the increase, but there are still splendid unimproved lands, both in the town and in the country, and real estate dealers report an active market. There has not been a drought here for five years, and it is quite probable that it should be one soon. It would serve to revive the question of irrigation and cause some of the contemplated systems to be prosecuted at an earlier day than otherwise.

The farmers of Yolo county are, as a class, a happy and prosperous people. The majority of them have established themselves in comfortable homes, surrounded by all modern conveniences, and have added attractions which go to indicate that they are determined to make them their permanent abodes. The slowly mode of conducting the farm is about discarded for systematic and orderly management. The rude farmhouses and unsightly outbuildings have been replaced by neat, attractive dwellings, and everything about them

exudes an air of advanced civilization, comfort and prosperity. The well-to-do farmer takes as much pride in riding out in his elegant carriage as does the town nabob. He is no longer a slave to the plow, but breathes the air of independence with the dignity of a king.

Fine stock-breeding has received an impetus here of late years, and the result has been most gratifying. Horsemen pronounce some of the stock the finest in the State. Yolo has produced a number of racehorses that have made noted records, and her displays at the State Fair are generally creditable.

Generally speaking, Yolo has fine roads throughout the county; although many of them have cost large sums of money, they have been made substantial.

The climate of Yolo county, though warm during the summer season, is beautiful. Good water is also a gratifying feature.

As an evidence of the rapid advancement of Yolo county, it may be stated that a well-known tract of land, known as the Wilcox & Farris tract, consisting of 2,117 acres, was fifteen years ago offered for sale for \$12,500 but no purchaser could be found, as, at that time, the price was considered too high. The same tract four months ago was sold for \$211,700, or \$100 per acre, the purchasers buying the same for purposes of speculation. It was even later than fifteen years ago when settlers began to pre-empt the plain lands of Yolo, which land now sells readily at from \$20 to \$40 per acre.

#### GRAPE AND GRAIN CULTURE.

It is useless to talk about grain farming as compared with the grape business for money making. Yolo county is exactly adapted for the latter, either for wine or grapes, as has been proven by years of successful experience. It is said by practical men that it does not pay to raise wheat (unless in exceptionally good years) on land worth \$100 and upwards an acre. And not only so, but the land becomes poorer the longer it is cropped in this way. With grapes the case is different. Their roots are long, and go down deep into the almost bottomless soil, while the vines draw much more largely from the atmosphere than do any kind of cereals. In fact, the only drawback we see to grape culture is that it takes three years for them to become profitable. But this is all made up in the fact that when a vineyard of good quality grapes is five years old it is worth four or five hundred dollars per acre. With good culture 200 to 240 boxes of raisins have been made here to the acre, and average good raisins are worth from \$2 to \$2.50 at wholesale rates. They do not vary in price as much as many other articles, as they have averaged these prices during the past five years. Taking the lowest figures of quantity and price stated above, and we have \$400 worth of raisins to the acre. A great deal more than that has been realized, from choice vines; yes, more than five times as much; but we do not wish to give fancy figures, only to state plain facts that are within the range of the capabilities of every man with intelligence enough to till the soil. Grapes yield from ten to eighteen tons an acre. Table grapes are worth \$40 per ton, and wine grapes \$20 to \$30 per ton. The third year a vineyard will pay all expenses of cultivation, and after that a greater profit the older the vines become, that is, with proper care and favoring circumstances. Besides, there is no danger of an unwise supply. It is easy to see, then, that the grape industry is soon to become the leading one in this county. Its soil, climate, irrigation and shipping facilities—everything seems to favor it. Where one family can do well at grain raising at least ten can make money from grapes and fruits of other kinds. Thus our population will be largely increased, and that of course will make it better for all classes of business. We have no doubt the population and wealth of Yolo county will double within the next ten years because of its already demonstrated capabilities in the direction above indicated.—*Yolo Democrat*.

#### COST OF HOP CULTURE.

Several inquiries have been received at this office about the expense of planting a hop field. In order to supply this information we have compiled several hop raisers. Through information thus gathered, we are able to present an itemized exhibit of the cost of planting, cultivating and caring an acre of hops. Ground rent and the cost of clearing are not included in the estimate:

Planting and harrowing	\$ 5.00
Roots, 1,500 a row and each	10.00
Water, 800 ft 2 1/2 inches each	3.00
Building poles	1.00
Tying and training	8.00
Cultivating	15.00
Training, a continuous task	5.00
Shearing and stripping, twice	5.00
Total	\$75.00

Added to the above is the cost of picking, curing, hauling, etc. Estimating the first crop of an acre of new hops at 600 pounds of cured, picking would cost \$24, curing and hauling \$15, and there would still remain an outlay for shipping, commission, insurance, etc. The outlay for an acre is \$114, and the result is 600 pounds of merchantable hops.—*Oriskany Press*.



## SEQUOIA GIGANTEA.

W. A. Sanders, a prominent citizen of Sanders, Fresno county, furnishes the *Rural Californian* with the following interesting communication:

The California "Big Trees" are found most abundantly just in sight of my place, eastward on the Sierras, at 5,000 to 7,000 feet altitude. Here are tens of thousands of them, from the seedling at a few inches height to the patriarch of the forest of a hundred feet girth and over 300 feet in height. Prof. Brewer in a communication to Sir Wm. Hooker, years ago, speaking of this collection of Sequoias says: "I found trees larger than they occur further north, in the Calaveras and Mariposa groves. The largest tree I saw was 106 feet in circumference at four feet from the ground. It had lost some buttresses by fire; it must have been at least 115 or 120 feet when entire; it is 276 feet high." Another item too good to omit is Bayard Taylor's account of the felling of one of the Calaveras grove: After a steady labor of six weeks the thing was done, but the tree stood unmoved; so straight and symmetrical was its growth, so immense its weight, and so broad its base, that it seemed unconscious of its own annihilation, tossing its outer branches derisively against the mountain winds that strove to overthrow it. A neighboring pine of giant size was then selected and felled in such a way as to fall with full force against it. The top shook a little but the shaft stood as before; finally the spoilers succeeded in driving wedges into the cut; gradually and with great labor one side of the tree was lifted; the line of equilibrium was driven nearer and nearer to the edge of the base; the mighty mass poised for a moment, and then with a great rushing sigh in all its boughs, thundered down. The forest was ground to dust beneath it, and for a mile around the earth shook with the concussion. "This tree was cut down by means of long augers worked by horse-power. By counting the annular rings it was ascertained to be over 1,300 years old. The leaves are only one-half of an inch long, lance-shaped, pointed, closely appressed, of pale green color. Cones are ovate-oblong, two to three inches in length, composed of twenty-five to thirty scales; seeds closely resemble pumpkin seeds three to eight to each scale. The wood so closely resembles the common redwood (*sequoia sempervirens*), as to be scarcely distinguishable. The bark is cinnamon-colored, making them conspicuous among the darker-barked firs and pines, among which they are always found. The name Sequoia was bestowed in honor of the Cherokee chief Sequash-yah, the inventor of the Cherokee alphabet, than which, no more perfect alphabet has probably ever existed.

A letter, just received, has before me. 'Tis written in a style of chirography that shows 'tis not an American production. 'Tis from a leading European seedsman. He says that when I shall again visit Europe, I can travel through young groves aggregating millions of trees, largely Sequoias, grown from seeds that I have shipped thither. During the same period how many of our California forest trees have been planted in our own country? We pause for reply, how many, and where are they? We don't know. These Sequoias will grow six feet per year under favorable conditions. What more honorable, enduring, or useful monument can a man erect in his memory to keep his acts, if not his name in remembrance for a thousand years,—than to plant a grove, a shelter belt, or adorn a roadside with some of these long-lived, beautiful and valuable trees? They do not transplant well. The safest way in the hands of a novice is to cut a lot of green, thin-barked tops of bamboo stems (you should all have bamboos growing) into lengths of about sixteen inches; punch out the nodes at the joints; fill them with dirt; plant a Sequoia seed in the top of each one. Set the bottom of your bamboos in water till your trees begin to grow. Now you have your young trees in shape to transplant without injury or retarding u-

growth. You can handle them as easily and safely as grape cuttings. Use only the tips of green bamboo stems, to insure their being thin and tender enough that the growing tree will split, and absorb them by its growth.

## SONOMA COUNTY.

The entire population of Sonoma county, as gleaned from the census of 1880, was 25,929. Of this number 19,883 are native Americans, 10,740 being born in the State of California, 1,198 in New York, 1,196 in Missouri, 384 in Massachusetts, 732 in Ohio, 730 in Illinois and 5,091 in other States and Territories; 6,093 are foreign born, 613 hailing from the various provinces of British America, 513 from

colt, consumed or on hand in 1876 was \$2,740,461.

The principal vegetable productions are given as follows: barley, 256,007 bushels; buckwheat, 152 bushels; corn, 154,829 bushels; oats, 63,683 bushels; rye, 4,058 bushels; wheat, 712,123 bushels; value of orchard products, \$168,787; tons of hay, 17,121; pounds of hops, 66,250; bushels of potatoes, 182,028; sweet potatoes, 320 bushels; pounds of tobacco, 667.

Live stock: number of horses in the county, 10,710; mules, 398; work oxen, 125; milk cows, 18,336; other cattle, 12,176; sheep, 113,973; swine, 12,788. Sonoma is credited with having more horses than any other county in the State except San Joaquin, which has 13,008; San Francisco is credited with

velous, surpassing even the wildest conjectures, the full extent of which we will endeavor to present our readers at some future date.—*Sonoma Index*.

## CALIFORNIA FRUIT ABROAD.

The fame of California fruits, the adaptability of the soil and climate to their culture, the demand for them, fresh and preserved, both locally and in foreign markets, and the increasingly remunerative prices which are the fruit-growers' return for invested capital and labor, are having the effect of drawing the attention of the California press more closely to this industry, and metropolitan and local journals engage heartily in what promises to be California's grandest enterprise. The Eastern press repeats and favorably comments upon the statements and facts produced here, and the result is a surely widening market. A writer in a late number of the *San Francisco Commercial Herald* says:

"The estimated total product of 1882 is, California dried apples, 1,000,000 pounds; dried peaches, 750,000 pounds; dried plums, 350,000 pounds; dried pears, 100,000 pounds; dried apricots, 200,000 pounds; dried prunes, 500,000 pounds; almonds, 200,000 pounds; walnuts, 600,000 pounds; honey, extracted, 700,000 pounds; honey comb, 416,000 pounds. The greater portion of all this product has already been marketed in the Eastern and Western States, where the dried fruits, nuts, honey, etc., of California are now being received with great favor, and from the constantly increasing demand it would seem that there is practically no limit to the coming demand, as only a very small portion of the consuming masses of the United States as yet have never seen or tasted California fruits. With a new route now open to the great South, a new field is now opened for these goods, and in a few years the fruits of California will be as well known in the markets of Galveston and New Orleans as they are to-day in Chicago, St. Louis and other Western States."

—*Napa Register*.

## BEET ROOT SUGAR.

A writer in the *Bulletin* of this city gives the following facts and figures regarding this industry:

Edward F. Dyer, son of E. H. Dyer, Superintendent of the Standard Sugar Company at Alvarado, Alameda county, California, has prepared a paper on the cultivation of the beet and the process of the manufacturing of beet root sugar, for which he has received \$1,200 from the Agricultural Department at Washington. California is about the only State in the country that has given much attention to the subject. Two or three factories of this kind have been in operation here for several years. They have had to contend with all the obstacles incident to the establishment of industries in new sections of the country, together with the additional prejudice against the use of beet root sugar. Many people have assumed, without the shadow of an excuse for their position, that sugar made from beets could not possibly be as good as sugar made from cane. Some imperfection in the earlier years of the manufacture of the article rather tended to confirm these prejudices. But the industry has worked itself into a recognition of its merits, and of late years there has been no difficulty in selling all the beet root sugar that could be made in California. If the product had been twice

as large it would have been sold just as readily. The Alvarado refinery produced 1,391,638 lbs. refined sugar during its third season and 81,775 gallons of molasses. The product for that season shows a value of \$158,617. The manufacturing expenses were \$109,358, while the other expenses incident to the sale of the product were \$1,324, thus leaving a profit of \$44,935. This is an industry that is susceptible of considerable enlargement in this State. In Germany, France and England, many thousand tons of beet root sugar are annually consumed. In some parts of Europe it is about the only kind of sugar used.

Subscribe for THE RESOURCES OF CALIFORNIA.



CALIFORNIA BIG TREES—MARIPOSA GROVE.

England and Wales, 1,387 from Ireland, 177 from Scotland, 996 from the German Empire, 154 from France, 148 from Sweden and Norway, leaving 2,016 to come from the rest of the world; 14,610 are males and 11,316 are females—the excess of males being 3,294. The number of males between the ages of eighteen and forty-four are 6,280, and of males over the age of twenty-five, 8,372.

Our county is credited with 2,229 farms; 193,370 acres of improved lands; farms, fences and buildings being valued at \$19,950,700; farming implements and machinery to the value of \$314,393; live stock to the amount of \$1,678,368. The cost of building and repairing fences in 1870 was \$129,611. Fertilizers to the amount of \$12,801 were purchased in 1873. The value of all farm products

8,600. We have more milk cows than any other county except Marin, which has 21,688; the county is credited with producing 661,721 pounds of wool; 1,895,523 pounds of butter and 217,860 pounds of cheese. Marin excelling us in the production of butter, being credited with 2,597,888 pounds; and San Mateo in cheese, producing 288,215 pounds.

In 1881 the acreage of vines in the county was 11,591 acres; the total wine shipments from Sonoma were 1,818,625 gallons.

Of manufacturing establishments, Sonoma county is credited with 212, involving a capital stock aggregating \$1,110,665, employing 556 males above the age of sixteen, seventeen females above the age of fifteen, and eleven children and youths. Since 1880 the progress has been something mar-



## PAMPAS PLUMES.

The pampas plum harvest will begin during the next month, and those who are interested in the growth of this peculiar plant from the Brazilian pampas are already making preparations to cut, cure and export the crop.

In conversation with Mr. John Spence, who is now largely interested in the growth of and who may be justly termed the founder of, the pampas grass industry of Santa Barbara, a reporter obtained the following interesting information:

The demand for plumes is steadily increasing and notwithstanding the fact that the production has been nearly doubled within the past two years, there appears to be no diminution in the applications for fine plumes. New York, Boston, Philadelphia and other large cities have, for some years, absorbed and monopolized the supply. It is only quite recently that a market for this beautiful grass plume from Santa Barbara has been developed in London, Paris and other European cities, in which they command fabulous prices. In Paris a fine pair of plumes will bring five dollars, and no doubt as they find their way through the regular avenue of trade to Berlin, Vienna, St. Petersburg and other large centers of population, the demand will still be further increased.

It has been a mooted question here in Santa Barbara, which is the principal source of supply, whether the market would not soon become glutted with plumes. Mr. Spence, who has given a great deal of attention to the subject, ridicules the idea of an over-supply. Last season Santa Barbara exported between 250,000 and 350,000 plumes, and still the demand was for more. This season the production promises to be much larger than ever before, as many new plantations are now coming into bearing for the first time. A moderate estimate of this year's crop, places it in the vicinity of \$40,000 worth of plumes, all which have been sold months before they gave any indication of sprouting.

One gentleman has a plantation of 28 acres, another one of eight acres, and there are many small patches ranging from one to two acres, in the county.

The pampas plume flourishes best in the vicinity of Santa Barbara. It may be safely asserted that it will grow to perfection in no other portion of the United States. The climate here is exactly suited to its growth. High winds, wet weather, heavy falls of moist fogs, which would prove fatal to it, are never experienced here during the month the grass produces its long feathery blossoms. It has been matured to perfection in English and French box-houses, but not in the open air. It will not grow to perfection in the adjacent counties of south California. North of us, the moisture and winds affect it injuriously. South of us, the hot winds parch it and retard its growth.—*Santa Barbara Independent.*

## FRUIT AND GRAPE CULTURE.

A. W. Eimes, of Los Angeles, in the course of a letter to the *Rural Californian*, makes a comparison as to the profits of fruit and grape culture. He says:

Now that the grape harvest is upon us, we bear of the large returns of wine and raisin vineyards to the fortunate owners of from \$100 to \$200 per acre, and the question is asked, how those returns compare with other fruits? Many of us have heard of the San Jose orchard of twelve acres of apricots, the crop of which, two years ago, sold for \$13,000, of \$500 per acre for Bartlett pears; and of three seven-year-old apricot trees at Riverside that two years ago produced 1,200 pounds. But these yields and returns are, of course, exceptional. An orchard, at full bearing, ought to average, one year with another, at least 150 pounds to the tree; apricots and prunes, if evaporated, will net three cents per pound; and at 100 trees to the acre, we have an average return of \$450 per acre for trees in full bearing. Pears will stand more trees to the acre, and apples, on a suitable soil, will produce a larger yield, bearing heavily every year, but apples evaporated will net only about one cent per pound. It is probably safe to say that orchards of properly selected fruits, in full bearing, will double the annual coin production of vineyards.

There are ten or twenty times as many acres being planted to vines as to trees, and if there is any danger of an over-stock of wine and raisins, there certainly is none for apricots, pears and prunes. If dried apricots were as plenty as prunes, there would probably be as many used.

The United States imported in 1881, \$1,280,613 lbs. prunes—custom house valuation, \$1,552,946.17; raisins, 39,159,755 lbs., valuation, \$2,711,771.74. In 1882, prunes, 59,170,395 lbs., valued at \$3,083,996.10—paid duty \$591,703.17. Raisins 43,779,807 lbs., valued at \$3,269,039.71—paid duty of \$1,097,496.71. From these figures it will be seen that the importations are increasing rapidly, and that we have a large and increasing market to supply.

It has been estimated that at the present rate of planting raisin grapes, in ten or fifteen years we would be able to supply our own country. Without arguing that point it is only to say we never will have as many apricots and prunes as our own market will take.

## THE FRUIT TRADE.

Yield, Quality and Prices of Santa Clara County Fruits.

Notwithstanding the unfavorable condition of a term of drought, followed by days of unusual heat which it was predicted would appreciably diminish the quantity of fruit grown in this valley the present year as compared with last, we are informed by a leading fruit grower, whose opportunities for cultivating accurate reports regarding the condition of the fruit interest are of the best, that the yield this season will not, as a whole, fall below the bulk of the last crop. The quality is fair, and, as to some fruits, will improve, he said, with the improvement in knowledge of horticulture of the growers, the work of cultivation with many of whom is tentative and experimental. By this remark it is not intended to assume a position of superior wisdom, but to emphasize the necessity of adopting the methods of work which long practice has shown to be the best. This is not done to the extent desired. There are, it is true, many growers who are abreast of the best demonstrations in matters pertaining to the culture of fruit, but there are also many others who give little heed to past results outside of their own narrow experience. The effects in either case are far-reaching, and will readily suggest themselves to the reflecting mind.

With respect to prices, the fruit-growers of this county are doing better than they did last year, and receiving about 50 per cent. more than was paid two years ago. For peaches, the canneries have been paying this season from two and a half to four cents per pound, the latter figure for choice fruit-stones. Prices for plums have ranged from \$40 to \$80 per ton, the higher rate being paid when it was believed that the plum crop was to be very short. Prunes have averaged \$60 per ton. For Bartlett pears two cents and two and a quarter have been the quotations, and they are lower now, as the quality of those grown here this season is not first-class. The best pears are those raised in the vicinity of the Sacramento river. Apples will be scarce and high, on account of the ravages of the codling moth. Small fruits were never so high as they are now. For blackberries \$4.50 to \$7 have been the prices per chest, and there has been such a scarcity of strawberries that, in giving canneries quotations, they must be omitted.—*San Jose Mercury.*

## MOUNTAIN VINEYARDS WITHOUT IRRIGATION.

A correspondent furnishes the *Sacramento Bee* with the following item of interest to all who are interested in raising fruit in the foothills:

I read with great interest an article in the *Daily Bee*, some time ago, upon the question of cultivation taking the place of irrigation, and I fully agreed with the writer at the time—that it was possible to make a success of fruit growing, and more especially grape growing, without irrigation. Since that time I have been privileged to visit a section of country where this matter is being practically (and I am glad to say, successfully) demonstrated. I was at Colfax, Placer county, recently, and received an invitation to visit the vineyard of J. B. Whitcomb, of which I availed myself, and I assure you it was indeed a pleasure to see this question so successfully settled. Mr. Whitcomb's vineyard is located upon one of the dry side-hills that abound around Colfax, and, in fact, throughout all our foot hill region. There are now twelve acres in bearing vines. There are a large number of varieties, embracing table wine and raisin grapes, and I was pleased to notice that all were a complete success, far surpassing in quality and quantity any vineyard of equal age that I have visited in any location this season. It is an old adage that seeing is believing, and I am sure that the many visitors at the Pavilion at this last fair will agree with me in my statement that Mr. Whitcomb's exhibit of grapes at the fair far surpassed in quality any other exhibit there. At the same time I visited another young vineyard of 40 acres, called the "Cape Horn Vineyard." This is owned by W. B. Hayford & Co., and has been described in your paper before. It was planted mostly of cuttings, which have attained to a marvelous growth, 80 per cent. being alive and thriving. In fact, this vineyard, by constant cultivation this season, has in one summer attained a growth equal to the average vineyard of two years ago. It seems to me, as I witnessed the success of these vineyards, that I could see the future of our foothill lands definitely settled.

## STRAWBERRIES.

Ten years ago a Yolo strawberry was hardly known. In later years a few have experimented with little spots, where fancy plants and special inducements were offered this fruit to develop. But it remained for Mr. Chard to be the pioneer in strawberries as a business. The money we have expended in years past to expressing this fruit from the gardens of Santa Clara, and the lost and broken boxes for which we have paid, and the return of the chutes, and crates, and boxes, have made our indulgence in strawberries and cream rather an expensive luxury. Mr. Ch. has so far been able to supply the town, and by this means has kept our money at home.—*Yolo Advertiser.*

## SIDE HILL FRUITS.

The Santa Barbara Press, of October 10th, has the following:

If anyone doubts the entire suitability and fitness of our side-hill soil for vine and orchard purposes, they should call at the office of Mr. G. W. Coffin where there is to-day a fair exhibition of what an ordinary side-hill farm in this county can do in a dry year. The samples from the Everett Hill ranch are grapes, apples and pears, the two latter being large and perfect specimens of their individual varieties, and the grapes being fine enough to tempt any man into turning vineyardist. There are Black Hamburgs as large as plums, Tokays several pounds to the cluster, Olivettes, Gordo Blancos, Bergers and four other varieties. No irrigating is done on the place in question and the grapes and fruit trees grow on sloping ground requiring but little care except pruning and cultivating once a year. Every side hill in this and adjacent counties ought to be covered with these or similar fruits. That it would pay is not to be doubted, if the right sorts are planted. Santa Barbara had to import Muscats this year to supply the canneries. It is hard to account for this; there is no place in the world where finer Muscats can be raised than the samples now daily displayed at our fruit stalls. Grapes are not to be mentioned alone. Glance at the peaches, nectarines, plums, apples, figs, apricots, lemons and nuts that grow hundreds of feet above the sea level. Pears will also thrive anywhere. John Kroig shows to-day a bunch of 21 pears, weighing eleven pounds, which grew on the J. M. Short place at the upper end of town. Rices and other fruit men constantly have on hand samples of Flemish Beauty and other varieties that grow on the ridgy tops of our highest hills.

There is no question that this side-hill farming, as done by farmers owning a few acres each, is to make the future wealth and fame of this county. Ventura and the southern part of San Luis Obispo, as the side-hill placers enriched, in days ago, the Sierra foothills.

## THE IRON MINE.

Over 300 Men Employed—Superior Iron Produced in Large Quantities.

The operations of the Iron Company at Hasting are growing in importance, and are being conducted on an extensive scale. The number of men engaged at the furnace, mining out the ore, burning charcoal, cutting timber, teaming and in other ways connected with the business, number well up towards 300 men. Teams are constantly engaged in hauling pig iron to the railroad station at Clipper Gap, two and one-half miles distant, where between 7,000 and 8,000 tons are now awaiting shipment. These huge piles of metal never fail to attract the attention of passengers on passing railroad trains, who, by this means, gain some idea of the importance of this new industry in the foothills. A survey of a railroad route has been made between Clipper Gap and Hasting, but whether the road is soon to be undertaken is not yet announced, but that it will become a necessary adjunct to the business there is no doubt. The company has recently bought large tracts of land from the Central Pacific Railroad for the purpose of obtaining wood to burn for charcoal, and also bought a great deal of standing timber from the individual owners on both sides of Bear river. The consumption of timber for the kilns is enormous, all kinds being used in making charcoal, and in a few years the country around Hasting for miles will be divested of its timber. The product of iron from these furnaces is of a superior quality, and now has preference over any brought to the coast. The Central Pacific Railroad Company uses it quite extensively, taking regularly 200 tons a month for making car wheels and other work. It would seem as if at no distant day, rolling mills will be established at Hasting, and that it is not improbable that it will become a place of no little importance in the manufacture of iron ware.—*Grass Valley Union.*

## FRUIT.

The *Tulare Register* says: To the practical fruit grower the Tulare River valley presents every advantage conceivable excepting that of a market. To be sure the soil is not all alike nor all equally good, but the kinds are so numerous that one can choose any he wishes. Some localities produce apples to perfection and others will not, so one must choose his location with respect to what he desires to grow. He can grow apricots, peaches, nectarines, plums and prunes anywhere. Apples will do best in the foothills or on reclaimed swamp land in the valley, and oranges must be where they will be sheltered from frosts.

## WHEAT GROWERS.

The Los Angeles Herald has been furnishing a list of the wheat growers of San Fernando, who raised this year a total of 197,951 sacks of wheat; John Olymian had 27,550; Kester ranch, 38,500; Van Nuy, 22,650; Patten, 14,500; Workman, 17,655; Gov. Porter, 21,680; R. K. Porter, 16,000; Muehly, 11,750; Jentler & Barrett, 11,160; Hubbard & Wright, 15,500.

## NICOLL, The Tailor.



## JUST RECEIVED

A Fine Assortment of Foreign and Domestic Woollens for this Season.

## CALL AND SEE OUR NEW PATTERNS!

Suits to order, from ..... \$20 00  
Pants to order, from ..... 5 00  
Overcoats to order, from ..... 20 00

## MEN'S, BOYS' AND CHILDREN'S SUITS AND OVERCOATS.

Manufactured by Ourselves, after the Most Approved and Latest Styles, at Short Notice.

## WELL CUT, WELL MADE, STYLISH AND CHEAP.

You will do well to inspect before purchasing elsewhere.

CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

## NICOLL, The Tailor,

PHILAN'S BUILDING,

816 & 818 Market Street,

SAN FRANCISCO.

BRANCH STORES IN ALL PRINCIPAL CITIES.

## THE ACCIDENT INSURANCE COMPANY

OF NORTH AMERICA.

ORGANIZED, A. D. 1872.

PRESIDENT—J. S. A. T. GALT, C. C. M. C.

VICE-PRESIDENT—HON. JAMES FERRIER.

MANAGING DIRECTOR—EDW. RAWLINGS.

HEAD OFFICE, MONTREAL, P. Q.

## IMPORTANT

—TO—

## Commercial Travelers AND MERCHANTS.

The new form of Policy issued by this Company grants permission for TRAVEL TO AND RESIDENCE IN EUROPE AND MEXICO WITHOUT EXTRA CHARGE.

The following condition, SO OBJECTIONABLE TO COMMERCIAL TRAVELERS, and heretofore found in all Accident Policies, is not contained in this Policy, viz: "Standing, riding or being upon the platform of a moving railway car, other than street cars, or riding in any place not provided for the transportation of passengers, or being on the bridge of any railway are hazards and contemplated or covered by this contract. And no sum will be paid for loss of life or disability (the consequence of such exposures) happening to any person other than employees, who shall have given notice of such occupation, and paid the fixed premium for such hazards."

## IN EVERY RESPECT THIS POLICY IS THE BEST EVER ISSUED.

Call at our Office and Examine before you take or renew a Policy elsewhere.

The record of this Company is also unimpaired. Not a single contest at law since its organization in 1873.

## H. D. IRWIN &amp; CO.,

General Agents for the Pacific Coast.

405 CALIFORNIA ST.,

SAN FRANCISCO, CAL.

JOHN T. TOY, City Agent.



## A GROWING TOWN.

In looking around us to-day, says the *Times* we find that Pomona is still building up as rapidly as ever. In the past few months wonders have been achieved in both town and valley. A town has been built that almost ranks second in the county. Throughout the valley elegant houses have been built, and vineyards, orchards and fields planted. Miles of cement pipe have been laid. Many artesian wells have been bored. The town has been supplied with water, and still the good work goes bravely on.

## LOS ANGELES OIL.

In company with Burdett Chandler and J. G. Boyer, of this city, it was our good fortune to visit, this week, the oil region in township 3 south, range 9 west, about seven miles northeast of Anaheim, and thirty miles east of Los Angeles. This remarkable region is at the extreme eastern end, so far as known, of the great break in the sandrock that rests within the great oil basins within the earth. The break is well defined from the San Gabriel to the Santa Ana river. Where the sandrock is broken and tilted northward, the gas from the oil lakes beneath the surface of the earth forces up the oil through the crevices to the surface where it runs off down the mountain and solidifies into asphaltum in vast quantities. This asphaltum has now been accumulating for thousands of years and is of vast dimensions. It crops out at the base of the mountain in a belt that varies from 200 to 900 feet in width. After the most careful examination of a geological character, locations have been made for wells and the work has been commenced in a most beautiful spot between Herald and Brea Canyons. This location is most favorably situated for the oil, and Mr. Chandler expects to show oil in ten days or sooner. As the whole mountain range seems to rest on oil sandrock, it will be almost impossible to sink a well without striking oil. There can be no doubt but that vast quantities of oil will be obtained and that it will be carried in a pipe line down to the railroad at Anaheim. In a few short months we predict that a forest of derricks will stand like sentries on the Santa Ana mountains, whose rocks will pour out rivers of oil.—*Los Angeles Herald*.

## LEVI'S VINEYARD.

This beautifully located vineyard, which is situated near Clayton and owned by J. Levi, is the largest now in the county. Mr. Levi planted this season some 75,000 vines and intends to put in about 80,000 more. He shipped, recently, some 500,000 gallons of two years old wine.—*Contra Costa News*.

## SOME QUERIES ANSWERED.

A letter from Annapolis, Nova Scotia, has been received, and the writer asks for an answer to the following questions:

1. What is the present price of land and can lots be obtained near the city at low figures?
2. Have you a near and remunerative market for poultry? Give highest and lowest price.
3. Are there any diseases peculiar to the country?
4. Are buildings necessary for keeping poultry?
5. What is the mode of irrigation?
6. Can lands be rented and at what figures?
7. When is the best time to come to California?

## Answers.

1. The price of unimproved land in the vicinity of Anaheim, convenient for irrigation, varies from \$50 to \$100 per acre. The land at these figures is of first quality, and is unsurpassed for the growth of grapes, oranges, lemons or other fruit. Some of the finest vineyards and orchards in the State are to be found here, and on soil similar to that we refer to. West of Anaheim, in Westminster township, land is selling at from \$20 to \$30 per acre. Part of this land is alkali, but on most of it alfalfa can be grown, hence it is a desirable country for dairymen and stockraisers.

2. The poultry products of Los Angeles county find, in the neighboring territory of Arizona, a market which it finds impossible to supply. There is a strong demand for eggs and poultry at all times and seasons of the year. During the past two years eggs have never brought less than ten cents per dozen, and the highest price paid has been 40 cents a dozen. It should be explained, however, that the low price of ten cents ruled but a few days, and was caused by an abnormal receipt of eggs from San Francisco. It would not be unfair to quote fifteen cents as the lowest figure.

3. If the third query relates to persons, we can emphatically say that there are no diseases peculiar to this country. It is the healthiest part of the globe. There are occasional deaths from malignant diseases, but the cause can almost invariably be traced to some insanitary condition of the immediate surroundings. Diseases never become epidemic. If, however, the query relates to poultry, we can say, upon authority, that they suffer no disease peculiar to the country, but improperly cared-for fowls are liable to diseases prevalent among poultry the world over. Only this and nothing more.

4. Buildings are necessary for keeping poultry, but they need be of the cheapest kind. "Buildings" is scarcely the word to use; "coops" would be more proper. This item of expense is trifling and inconsiderable. While upon this subject, we think our correspondent will be interested in reading the following statement published in the *Gazette* some time ago by Mr. W. G. Potter:

"We have averaged about 150 hens, mostly Leghorns. They have for their morning meal wheat bran and corn meal (about two-thirds bran to one-third corn meal) mixed with some milk and buttermilk, with scraps from the table. They are given also an occasional meal of boiled potatoes and other vegetables, and meat scraps procured from the pork packing houses, boiled and mixed with their morning meal twice a week; also a dose of cayenne pepper once a week mixed with their food. At night they have whole grain, corn and wheat. For green food plenty of alfalfa. We can not give the cost of feeding, but have had to buy nothing but the bran and scraps, as the grain was all raised on the ranch.

Number of eggs laid (including breeding pens) from January 1st to December 25th, 1882:

January.....	1,301	July.....	2,279
February.....	1,433	August.....	2,434
March.....	2,354	September.....	1,748
April.....	2,342	October.....	1,558
May.....	2,385	November.....	1,616
June.....	2,241	December.....	1,542
	12,251		10,875
			12,351

Total.....23,127

The proceeds from the breeding pens for eggs and chickens sold, amounted to \$74.85; and the proceeds from the whole (including the breeding pens), for eggs and chickens sold amounted to \$371.33.

The number of eggs laid by six Brown Leghorn pullets, from March 1st to October 1st, amounted to 720."

5. Vineyard and fruit land is irrigated with water from the Santa Ana river, conveyed through ditches to the land to be irrigated. The ditch which conveys water to Anaheim is twelve miles in length, and there are probably four or five miles of distributing ditches.

6. Land can be rented for grain raising. The rental rate is \$1.50 per acre cash for unbroken land, or \$2 per acre for land which has been cultivated. If the rental is on shares it is usually one-fifth of the crop, delivered at the railroad depot, each party furnishing his own seeds. The above are the terms of the owners of the Stearns Ranches. Corn land usually rents for one-fourth of the crop, shelled.

7. If one wants to come to Southern California, he may come at any time. The winters are mild, and three feet is not characteristic of summer, and if our correspondent is moved to make a change from considerations of health the sooner he comes here the better.—*Anthony Gazette*.

## THE TIMBER SUPPLY.

A Timber Man's Opinion Written by One Who Knows.

We very often hear it stated that the Truckee timber is exhausted, and that new fields must be sought. This is a great mistake indeed, says a correspondent of the *Truckee Republic*. We will start at the State line and visit the country as we go west. The first stream is Bell's creek, with right sections of land and one-half section cut. The next is Wallace's creek, where two-thirds have been used for several years, and one has been built and used for twelve years. Although a short stream, three miles long, still half the timber stands. Wicke's creek, next to turn, brings us to one of the finest wood and water privileges in the mountains; with its four large branches it drains and is an only outlet for twenty sections, and only about two have so far been cut, and the Brown wood yard is always kept full. During the past fifteen years 50,000 cords of wood have been hauled there. On the north side Wicke's creek is a tract of yellow pine that will cut 75,000,000 feet of the best of lumber, while on the lower waters are the finest tamarack swamps in the Sierras. A mile further west brings us to Cuba, where the Gray creek comes in draining ten sections more of timber land, which, so far, has not been touched. A little to the south and west four miles in Jumper creek, draining fifteen sections, with only three cut. Our next stream is Maria creek, of which the last branch drains ten sections in their native state. The east middle branch is occupied by the factory of Andrew Miller. Two sections comprise the cut here, and four more are in their natural state. The west middle branch is occupied by Richardson & Bros. Four sections have been cut and eight more upon the Tahoe divide can be reached. The west branch of Maria creek is mostly owned by George Shaffer, who is now building a new mill in very dense timber, where years of work have been and still can be done. We now come to the town of Truckee, where one of the most enterprising firms of the Sierras have their works. The whole upper Truckee to Tahoe has for years and will continue for years to come, to supply them with logs and the railroad company with wood. Although mills and axrs have been at work on Tahoe for ten years, still much more than half the timber remains. Returning to Truckee we go up to Donner and the summit slope, where a great many acres of fine timber still stands. Climbing the hill north of Donner we enter a basin of six sections on Trout and Alder creeks. These land can be reached by the home of Mr. Ellen, one of the sleekest places in the mountains. The Alder creek timber still mostly stands, and will send wood and lumber out for years. Our next stream is the noted Prosser creek, where Messrs. Lankey & Smith have a mill and flume in the lower border of the timber, and here only about one-third of the timber has yet been cut. The same firm has a mill and flume on Sage Hen creek, which has so far cut but about four sections of the twenty on that stream. We now come to the Little Truckee, one of the most valuable and extensive regions of timber in the Sierras. From Bora to Dog Valley, 10 miles north, is a fine strip of twenty sections; from Ingram station to Webber lake, including Sierra Valley divide, where timber can and must come to the Truckee, are one hundred sections. Around Webber and upon Henness Pass divide are forty sections more. From Webber to Independence lake are also twenty sections, and around Independence down to Boca are forty sections more, and of all this vast area but twenty sections are yet cut, and many of these only in part. Our next field is from Clinton to Dog Valley, where we find on the north side of Truckee a strip of timber two and three miles wide for fifteen miles, thirty sections more, and in Dog Valley there must be still some twelve sections of good timber yet remaining. To take the Truckee basin as a whole, there is at the present time not less than 5,000,000,000 feet of saw-lumber remaining. This will afford 50,000,000 a year for 100 years. These facts are arrived at by actual exploration and observation. It is really a fact to-day that many do not see a good investment in this timber, as there is so much of it that it seems a long time before it all can be brought into market. There is not another region in the mountains where the timbers are as good, and where lumber can be brought to the railroad so easy. In fact, the Truckee basin is the lumberman's paradise.—*Sacramento Bee*.

## FORTUNATE MAN.

Rev. M. McWhorter, of Biggs, is in big luck. Some months ago he discovered a vein of coal on railroad lands in Colusa county. When opened, it proved to be of an excellent quality, and apparently inexhaustible in quantity. The Contra Costa Company has paid him the sum of \$20,000 as a token of the gentleman's energy and success. Besides this, Mac retains one-third interest in the property, the remaining two-thirds being owned by capitalists of Colusa and San Francisco. We congratulate the ex-journalist upon his good luck. He has a bonanza in the mine, and will in a few years be numbered among the wealthy men of the coast.—*San Francisco Herald*.

## MUTUAL RESERVE FUND LIFE ASSOCIATION,

55 Liberty Street, New York.

INCORPORATED UNDER THE LAWS OF THE STATE OF NEW YORK.

EDWARD B. HARPER, President. T. A. AN, Secretary. CHARLES R. BISSELL, Treasurer.  
O. D. BALDWIN, President Fourth National Bank, New York, Auditor of Death Claims and Reserve Fund.  
The Fourth National Bank has a paid-up capital of \$200,000; \$20,000,000 daily balance; \$30,000,000 passes through the President's hands each day.  
CENTRAL TRUST COMPANY, of New York—which has assets of \$12,000,000—Trustees of Reserve Fund Account.

\$10,000 LIFE INSURANCE FOR \$50. \$5,000 FOR \$30.

## OUR PILLARS OF STRENGTH.

- First—Graded assessments, so that the young and old will pay their exact proportion, and only as the same shall be required.
- Second—A Reserve Fund, so that the permanency of the Association is guaranteed.
- Third—A careful Medical Examination, so that only the healthy can become members, thus insuring a low mortality.
- Fourth—The Tontine System, so that old members will reach a point where no further payments will be required. New members will endeavor to reach this point by being persistent in their payments.
- Fifth—By placing the Trust Fund beyond the control of the Officers and Directors, so that no part of the same can be used in paying exorbitant salaries or expenses, or misappropriated or corruptly handled by them.
- Sixth—An open Ledger, so that the affairs of the Association may always be known to its members.
- Seventh—The limitation of the expense of the Association to the amount received from the admission fees and annual dues.

No association presenting these combined features has ever failed in the history of insurance. No plan of insurance ever presented to the public has such a universal hold on the hearts of the people, and has been so unanimously accepted as a sound basis for permanent protection to the insured, as that adopted and presented to the public by this Association.

THE ASSESSMENT FOR 1882, AT AGE 35, WAS ONLY \$3.10 FOR EACH \$1,000.

This Association is to-day composed of over fifteen thousand business men, such as Bankers, Merchants, Lawyers, Editors, Professors of our Colleges, Clergymen, Manufacturers, United States and State Senators, Chiefs of our Government Departments, and others, all united together for the protection of their families, upon a common-sense plan, each member contributing the exact amount required for the protection afforded.

Our business in force at the beginning of the year was \$7,657,800. At the end of the year it is \$75,270,250. The assessments for death claim per year, for the past two years, have been, at the average of 35, but \$3.10 per thousand dollars insurance, while all of our death claims have been paid in full when due; while, at the same age, the usual rates under the old system are \$16.60 per year, or \$33 for the two years, on each one thousand dollars of insurance.

## APPOINTMENT OF AUDITOR.

Mr. O. Baldwin, the highly esteemed President of the Fourth National Bank of New York City, a bank possessing assets exceeding \$40,000,000, has become our Auditor of the Death Claims, Reserve Fund and Assessment Accounts. Within the past four months he has caused two examinations to be made into our accounts. In each case his examination, as per his report, has proved eminently satisfactory.

## TRUST COMPANY AS TRUSTEE.

Your Board of Directors within the year have also selected the Central Trust Company, of this city, to act as Trustee of our Reserve Fund, of which Mr. Henry P. Spaulding is President, and the Hon. J. P. Olcott, late Comptroller of the State of New York, is the Vice-President. The contract made with the Trust Company places the funds of the Reserve Fund beyond the control of the management of this Association, yet retaining a contiguous supervision to prevent peculation from other sources. The Central Trust Company has cash capital and surplus of \$1,500,000, with assets exceeding \$12,000,000; thus all conceivable safeguards have been thrown around the affairs of this Association.

## OPINIONS OF ACTUARIES.

Within the past year we have received written opinions from the great Actuaries of our country, Hon. Elbur Wright and Mr. Shepley Wiggins, as well as the opinions of many other equally reliable Actuaries. In every case the report has been that our system is correct, and our Association will be a permanent and useful institution.

## TWO SYSTEMS ANALYZED.

The fact is, there are two systems of Life Insurance in existence to-day. The one is known as the Level Premium System; the other is known as the Assessment System.

## ASSESSMENT SYSTEM.

The Assessment System requires the members to provide for their losses as they occur. It admits of the insured being the custodian of their own money until it is absolutely needed; and its only weak point, as developed by the experience of the past, is a lack of robustness, which has been fully provided against under the Reserve Fund system of this Association.

## LEVEL PREMIUM SYSTEM.

The Level Premium System requires the members to provide for the losses before they occur. It admits of the proper amount to be collected in advance, they have adopted what is known as the American Experience Mortality Table. The correctness of this table is not a matter of doubt. That it, with the interest on the excess of payments, are the only elements to be considered in making up the cost of life insurance, is a disputed question, but we say the Level Premium System is correct, and our Association will be a permanent and useful institution.

Our rates are based on actual and not on assumed mortality, as is the case with the old companies, which require in advance four times the actual cost of insurance.

FIRST-CLASS MEN WANTED IN EVERY TOWN ON THE COAST AS AGENTS.

Call on or address

C. M. OAKLEY,

General Agent Mutual Reserve Fund Life Association for the Pacific Coast,  
311 MONTECALMO STREET, SAN FRANCISCO.

**ADVERTISERS**  
Can learn the exact cost of any proposed line of Advertising in American Papers by addressing Geo. P. Rowell & Co's Newspaper Adv'g Bureau, 10 Spruce St., N. Y.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WESTWORTH.

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 340 Sansome St., Halleck Building.

ISSUED MONTHLY.

Terms .....\$2 per Annum.

SAN FRANCISCO.....NOVEMBER, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western or Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

First Page.—San Bernardino County.  
Second Page.—San Bernardino County, Continued.  
Third Page.—Santa Cruz County.  
Fourth Page.—Santa Cruz County, Continued.—Horticulture in Heidelberg.—Yolo County.—Lima and Grain Culture.  
Fifth Page.—Saguena Gigantea.—Sonoma County.—California Fruit Abstract.—Beet Root Sugar.  
Sixth Page.—Pampas Plum.—Fruit and Grape Culture.—The Fruit Trade.—Mountain Vineyard Without Irrigation.  
Seventh Page.—Some Queries Answered.—The Timber Supply.—Los Angeles Oil.  
Eighth Page.—Inquiries For Land.—Bringing Oranges.—How A Small Investor Pays The Benefits Resulting From The Division of Large Land Tracts.  
Ninth Page.—Fruit Culture.—Spanish Wine.—Wine Making.—Evidence of California's Surveys.—Valuable Land Sold.—Foot-hill lands.—The Bonanza King Mine.  
Tenth Page.—Letter From Banding.—A Little Bonanza.  
Eleventh Page.—Great Industry of the Future.—A Growing City.—Merced's Future.—Agriculture in California.—Mining Items.  
Twelfth Page.—A Fertile Spot.—Another Foot-hill Farm.—Concent Deposit.—A Good Work.  
Thirteenth Page.—Small Farms in the Majority.—A Rich Strike of Silver Ore.—A Valuable Mine.—Concerning Small Farms.—A Competency Quickly Acquired.—We Move.  
Fourteenth Page.—What Is and Should Be.—A Growing Settlement.  
Fifteenth Page.—Two Agricultural Systems In Contrast.—Out-door Life in California.  
Sixteenth Page.—Stock Raising in Future County.—Of Expected Interest to California.—The Oil Trade.—Calaveras County.—Placer Mines.—The Exporting of Manufactured Products.

## INQUIRIES FOR LAND.

At no time in the history of California has there been such a demand for homes within her boundaries, as at present. It is gratifying to learn that the recent sales of real estate, in this city and State, are of an encouraging character. In our opinion there is no safer investment for capital than in land. There is hardly a locality in the State but what offers good opportunities for the purchase of real estate, at prices that will warrant a large interest on the money invested. Farming lands in Yuba, Sutter, Yolo, Sacramento, and other valley counties, have advanced very greatly in price of late, and many sales have been made. Our exchanges from Shasta, Modoc, Trinity, Siskiyou, Plumas, Lassen and other northern counties continue, from week to week, to report progress in this direction. There are many sections, in those mountainous counties, that offer inducements to industrious and energetic persons.

The Sacramento Bee learns, from residents of the foot-hill sections of Nevada, Placer and El Dorado counties, that there is an increasing demand for orchard and vineyard lands in those localities. Some lands, recently purchased of the railroad company at low figures, have been sold at an advance of 100 per cent., and strangers are daily visiting the foot-hills in search of desirable locations. The records of the Central Pacific Land Department show that, within a few months past, nearly one million dollars' worth of railroad lands have been sold, in small parcels, to actual settlers, or persons who intend to become such at an early day.

In short, the land boom is not confined to any particular section, but it seems to be pretty general all over the State. Strangers looking for locations are everywhere numerous, and our exchanges, from the north to the south, report sales, in their respective localities, almost daily. It is feared that some of those now selling their homesteads and well cultivated farms, because they can get what they consider a big price, will yet regret their hasty action. The *Piedmont Courier*, for instance, in speaking of the real estate sales in its section, remarks that the most of the men selling out, have, after a long struggle, just got into a position where they could live comfortably and independently; and with such it is a

mistake to sell unless they have a dead certainty in sight.

We notice, also, that many large ranches in the southern portion of the State are being subdivided. This is the right policy for large land holders to pursue; such a course will greatly benefit the State, as well as themselves, for it will cause the immense tracts to be quickly settled with a dense population of industrious and thrifty farmers.

The railroads are justly entitled to a large share of credit for the settlement and development of the State. The Southern Pacific has opened up new areas of territory, within a brief period, which are being rapidly settled by a desirable population. The merchants of Los Angeles, and other large towns in that section, are now offered an opportunity for shipping their products to new markets in Arizona, New Mexico, Texas and even old Mexico. Since its completion, property of every kind has enhanced greatly in price in the southern counties.

As the State settles up, and railroads and other facilities are established, land will continue to advance in price. This has always been the case since the early days of the Great West, and history will continue to repeat itself until the whole Western Continent is as densely settled as that of the old world. Any person who has a few hundred dollars, supplemented with a good stock of hard common sense, pluck and perseverance, can not do better than to invest it in real estate in California. There is no part of the world where industry is better rewarded. The farmers of California are prosperous above the average.

## GROWING ORANGES.

As it has been practically demonstrated that oranges, as well as the whole citrus family of fruits, can be successfully cultivated in every portion of the central, and even in some of the northern counties, we have no doubt but a much larger number of these trees will be planted next season than in any previous year. We learn that many horticulturists propose to plant this fall extensive orange and lemon orchards. Besides, many yards, in the towns and cities of the interior, will receive the addition of a few trees, with the double view to ornament and fruit.

In El Dorado, Placer, Sacramento and Butte counties, oranges thrive well and are already a source of considerable profit. The Sacramento papers state that the orange tree grows in Sacramento as well as in any other place in the State, and that the fruit ripens there early and sweetens to perfection. The local papers add that no house in that city, which has a piece of ground large enough, should be without an orange tree on it. The same will apply to many other places. The San Jose *Mercury* says, that the orange tree flourishes there lively, and when laden with fruit becomes a beautiful ornament. These trees are always handsome as evergreens, and when laden with their rich clusters of golden fruit are really the most beautiful thing that can be placed in lawn or garden. Besides, a farm which has ornamental trees around the house, or even in front of it on the road-side, will always bring a large price when the owner may desire to sell it. There is no denying the fact that even the most plotting and practical men to be found anywhere in the world—men whose minds are, apparently, wholly devoted to money making, still have an eye for the beautiful. Therefore, we would suggest, that, taken in this point of view, it is advisable to plant trees around the farmhouse.

## CLAYTON'S QUAKER COOK-BOOK.

This is a valuable publication of upwards of 100 pages. It is neatly printed and prettily bound. It is written by one of the enterers of the Pioneer times, H. J. CLAYTON, and is one of the most instructive works, on the culinary art, extant. It cost but \$1.50, and should be in every household where good cooking may be desirable.

## VINEYARDS.

It is stated that a well-managed vineyard in California will bear a full crop the fifth year, and furnish enough to make 100 boxes of raisins to the acre. The prospect for the future is, that the supply of raisins for consumption in America, will be produced in California, and sanguine grape-growers think that the future will witness their exportation.

## HOW A SMALL BUSINESS PAYS.

Instances are constantly being mentioned in our exchanges, going to prove that a man can make a good living for himself and family in California by engaging in what some people would call a small business. There is no doubt, for instance, but a hundred and fifty hens will make a living for a family of two or three persons. We saw it stated, not long since, in some one of our interior papers, that a man cleared eleven dollars, net gain, in a single season from one hen. She had three broods of chickens worth eight dollars; two lots of eggs which sold for five dollars. The other hens paid him seven dollars each. A man in San Joaquin county purchased, two or three years ago, twelve dozen fowls, from which he raised about 500 hens. For twelve months he carefully marked down his expenditures and sales of eggs and found that he had cleared the best little sum of \$897.85. A farmer in Santa Clara informed us, not long since, that, in his judgement, there is no branch of business which pays the farmer so large an interest for the money invested, or which had been so thoroughly neglected, by the farmers of that valley as poultry raising. He said there is not a month in the year that a flock of chickens cannot scratch a good living around the barn. A farmer in Amador county, recently told a correspondent of the *Chronicle* of this city, that, for three years, the proceeds of the poultry yard, in eggs and broilers had maintained his entire family, giving him the coin, realized from his grain fields, to pay for the farm which he had purchased on time.

Now, comments on the above are unnecessary. It is a well established fact that, more money can be made in raising poultry, if of a good quality, and producing eggs in California, in proportion to the capital invested, than in any other branch of farming. The poultry business, like many other branches of industry, has grown wonderfully everywhere during the last twenty years, and now lends nearly all others in supplying healthy food for the millions of human beings in the world. The extent and value of this branch of industry in the United States, at present, is by no means appreciated. It has been estimated that the total consumption of eggs (daily) in this city is 14,000 dozen. The total consumption last year was 4,856,922 dozen. Of these, 10,000 dozen came from Oregon, 351,290 dozen from Eastern States, 360,000 from Utah, and the balance from this State. In the places from which eggs are imported, the conditions and climate are not so good as in our State. It is fair to suppose that these eggs were sold at a reasonable profit after having been brought across the continent some 3,000 miles by rail. The general scarcity of eggs naturally suggests the inquiry as to why a greater number of men and women do not engage in this branch of farming in California. It is most surprising to see so many idle people, in this and other large cities and towns of the State, who might go to the country and engage in this so-called little business, and, in a few years, become possessors of comfortable homes. Eggs are a cash article, and returns from them can be realized more rapidly than in almost any other branch of business. Those who are looking for some light and easy occupation should give this subject attention. Here is a field for that class of people, in San Francisco, who are always complaining that they cannot find anything to do by which they can make a living.

## HON. C. A. WASHBURN'S PAPER ON "FORESTRY."

This gentleman, on the 23d, of October, read an able and instructive paper on "Forestry," before the Geographical Society. It was listened to with marked attention throughout. The paper, like all emanating from the pen of this able writer, was full of valuable thought, and we should be tempted to publish it in full, if the author would furnish us with a copy.

## A PAYING ENTERPRISE.

There is a woolen mill in Santa Rosa that is in successful operation, employing 45 hands, none of whom are Chinamen. The mill pays well and recently had to enlarge to meet the demand for its goods. The texture of the material turned out is rated as first-class. We would like very much to see a similar enterprise established in this place, believing that it would prove a paying investment. —*Los Gatos News*.

## THE BENEFITS RESULTING FROM THE DIVISION OF LARGE LAND TRACTS.

What California has long needed for the development of her great agricultural resources is now taking place. We allude to the division of lands into smaller holdings and the cultivation of a greater variety of crops. It requires no argument to prove that it is the part of wisdom for those owning large bodies of land to subdivide them and sell to actual settlers. We are gratified to be able to state that this policy is being pursued in many of the agricultural counties of the State. For the purpose of showing how it will benefit one county, we will state that the enormous wheat ranch owned by the late Dr. Glenn, in Colusa county, is to be cut up into small sized farms. Instead of one farm-house on 60,000 acres there will be hundreds of beautiful houses dotted over it. When his immense estates are thus reduced and are held by the many, who will properly cultivate them, instead of the few who are exhausting them, California will become what it has the capacity of becoming, namely, the finest agricultural State in the Union. In our opinion owners of farms, ranging from 200 acres and upward, would find it to their advantage to subdivide them into twenty, thirty, forty, fifty and one hundred acre lots, according to proximity to towns. The increase in population, alone, would enhance values. Small farms are the nurseries of a good class of agricultural laborers, and the State needs such. They promote thorough cultivation and build up towns and enterprises of various kinds in their midst.

The advantage of small farms as tending to insure personal independence and national wealth, was very effectively illustrated by General Butler (one of the speakers at the great Dairy Convention held in New York) by comparing the agricultural statistics of France with those of the United States. He said, in substance, that with an area only a little larger than that of the State of California, but all divided up into small freehold properties, and every acre improved by careful cultivation, France, besides her wine, cured fruits, raw silk, and other special products, raises more wheat, barley, rye, oats and buckwheat than all the United States; nearly as many horses and neat cattle, more sheep, and more than one-third the quantity of swine. Such comparisons teach us the wisdom of the policy, that France, by the subdivisions of the land, has made so large a proportion of her people freeholders and farmers.

## A WIDE OPEN MARKET.

As an illustration of the extent of the market open to the fruits of California we mentioned the fact that fruit was shipped in September, from the Rancho Chico orchard to the State of New Jersey in the east, and to Fort Klamath in the north, a distance of 250 miles above Reading, the terminus of the railroad. There is in fact no limit to our market. The great Eastern cities have become heavy customers of fresh fruits from California, and now the interior towns begin to come in. Wherever there is direct railway connections the fruits of California orchards may be sent in a fresh and healthy condition. The opening of communication along the northern line by the Villard road will make a great market for the fruits of the Sacramento valley; even as the opening of the southern route did for those of the lower counties. The fruit business in California is in its infancy—even for fresh fruits. But the demand for dried fruits is unlimited. —*Chico Enterprise*.

## SCHOENES &amp; CO.

We call special attention to the advertisement of the firm lending this notice, to be found elsewhere in this journal. It is the oldest established house, now dealing in its line of goods, in the city. During the procession of the Knights Templar, recently held here, the elegant costumes worn by many of the members of California Commandery, No. 1, which attracted the marked attention of so many spectators on that gala occasion, were manufactured by Schoenes & Co. The establishment where its goods are manufactured is doing a large and prosperous business. We most unhesitatingly advise all of our readers, who may wish to purchase anything in the line of goods named in the advertisement, to give this old and favorably known firm a call.

Subscribe for THE RESOURCES OF CALIFORNIA.



## FRUIT CULTURE.

It is safe to predict an early day when this State will rank among the first fruit producing countries of the world. Its yield this year, will, probably amount in value to something over \$8,000,000. What may we expect a few years hence, when all of the young orchards that are now being planted come into bearing? It has been estimated that seventy five per cent of our orchards devoted to the finer grades of fruit such as apples, oranges, nectarines, lemons, lemons, prunes etc., are not yet in full bearing. Each year will increase their yield. Our farmers are depending less every year on the wheat crop and more on general products and new industries. They are beginning to understand that unlimited markets have been opened up within a brief period of time, for all the varieties of choice fruit that can be produced. The demand for California fruits, in the Atlantic States and Europe, is increasing very rapidly. It is estimated that 12,000 tons of fruit were shipped overland from California this year. This is an increase of 1,000 per cent on the shipments of four years. Few people have a correct idea of the magnitude of the fruit canning business of California. It will soon equal in value that of the cereal production. Last year it reached an enormous sum. It has been estimated at nearly forty per cent of the value of the wheat crop and about fifty per cent of the entire production of the gold mines. Many farmers have discovered that there is much more profit in an acre of orchard or vineyard than there is in several acres of grain. The investment of capital in fruit canning establishments, in various localities, is having the effect of encouraging fruit-growing. Notwithstanding canning factories have greatly increased in number within the last year or two, they are not half plentiful enough. There is no good reason why these establishments could not be made to pay a profit in every fruit-growing district in the State. They could be run as cheaply in the interior as in San Francisco; and they would give employment to many boys and girls at remunerative wages. An establishment sufficiently large to use up the surplus fruit of its section of the State need not cost a very great sum of money, and it would be the means of keeping a considerable portion now sent out of the State, for canned fruit, in circulation at home. It is said that "with all commercial nations the consumption of fruit is yearly becoming more enormous, and a vast importance must ultimately attach to the very few regions of the earth where fruits can attain the rich perfection that our climate and soil ensure."

## AN IMMENSE WOOL CLIP.

The wool clip of the United States for the current year promises to exceed that of 1882 by 15,000,000 to 20,000,000 pounds, in which event it will aggregate about 320,000,000 pounds. The increase will be chiefly in the territories. As the requirements of American mills are about 7,000,000 pounds per week, it will be seen that even with this increase in the domestic supply there will still be nearly 50,000,000 pounds of foreign wool required to meet the wants of manufacturers. The deficiency is chiefly in carpet wools, to the growth of which comparatively little attention is given in this country. The bulk of the supply of this class of wool is drawn from the Mediterranean ports, from East India, Syria and Russia. In addition to these imports, however, there is a considerable amount of Australian clothing and English combing fleeces annually imported in competition with similar quantities of home-grown wool; and under the new tariff these importations are likely to increase unless lower prices are established for the new clip than were current at the opening of the season last year.

## A GROWING LOCALITY.

The people of Santa Ana and vicinity have reason to be proud of their town and county. There is more solid improvements going on, and more good substantial buildings going up in Santa Ana than in all the other towns, villages and hamlets between here and Los Angeles. An iron carpenter can not be found in town, and wages are generally good. We notice, in our visits to Los Angeles, that the business men of that city regard this valley as the best portion of Los Angeles county, and yet many of them have never seen it.—*Santa Ana Standard*.

## SPANISH WINE.

An interesting letter from Spain by Alex. del Mar in a recent issue of the *Chronicle of this city*, contained the following spicy reference to the beauties of Spanish wine:

Grape vines are grown in Spain, as in California, without supports. The annual exports are of common wine 35,000,000 gallons; Cata-lan wine, 7,000,000 gallons; sheries and ports, 12,000,000, and other kinds, 2,000,000; total about 56,000,000 gallons. The common wines go to Cetto and Bordenax, where they are mixed with water, cheap spirits, a purple coloring matter and some other substances. They are then bottled, labeled with high sounding names, as St. John, St. Estephe, etc., and exported to all parts of the world as genuine Bordeaux wines. In many cases the adulteration is carried so far that there is scarcely a trace of wine in the mixture; yet when the palate becomes accustomed to it nothing else is recognized as genuine. About one-fifth of the so-called sherry wine from the Cadiz districts consists of low and spurious compounds mixed in France; about two-fifths of ordinary sherry, about three-tenths of good sherry and one-tenth of superior wines. The best wines are from the St. Mary and Jerez districts. The grapes are pressed with the feet. The wine has an earthy, tarry flavor, which is removed by "treatment." The adulterants used are water, molasses, litharge, gypsum and German potato spirits (*kartoffel fusel*). The crack "dry" sheries contain gypsum, a "color-wine" or wine boiled down to the consistency of sugar-house syrup; "sweet wine," or wine made from raisins, and brandy. They contain from 32 to 36 per cent. of alcohol. Most of the wines are transported from the country to the cities in ox and pig skins. What with the dirt of the fields, the dirt of the peasants' feet, the dirt of the pig-skins and the dirt of the adulterants, the epicure in Spanish sheries must get a stomach full. That any decent, "self-respecting white man" can without repugnance, pour down his throat such unmitigated nastiness is only to be accounted for on the ground that he is utterly unaware of its history and composition. That before many years California, with its superior methods of handling and transporting wines, will drive Spanish wines entirely from the markets of the world is my firm conviction. But a few years ago Russian Ghirka wheat brought the highest price of any cereal in the Liverpool market. This distinction now belongs to California club wheat, and it is said to be due as much to the superior cleanliness of the article as to its other good qualities. A German brewer who uses a battery of magnets under his wheat-hopper told me that he had taken several tons of old iron out of his Russian wheat, but never a nail or a bit of wire out of his California consignments—and as it is with junk iron in wheat so it is with dirt in wine. The California article is free from it.

## A HINT TO NEWCOMERS.

From our interior exchanges we learn that the outlook, for laboring men, all over the State is excellent. The time has now arrived, in California, when farmers can keep men employed the year around. To those newly-arrived immigrants, who are looking for work, we would say, do not go near the cities; better strike right out on arriving in the State, into the agricultural districts and accept the first opportunity offering for employment; go to work and you will learn more that will be really valuable to you about the State and its people, in a few month's time, than you can learn in a life time in the city. There is a good demand for laborers, at fair wages, at the present time, and the prospects for its continuance are far better, in our judgment, than they have been for many years. As a consequence of so large a harvest of many products, farmers will increase their acreage, which, with new buildings, repairs, etc., will absorb a considerable force of both skilled and unskilled labor through the fall and winter months.

## RICH SULPHURETS.

The Murchie Mining Company has shipped thirty tons of sulphurets valued at \$350 a ton to Omaha, for reduction. This is done as an experiment, it being claimed that by a process in operation at Omaha better results can be obtained than on this coast. It remains to be seen how well this claim is founded.—*Nevada Transcript*.

## EVIDENCES OF CALIFORNIA'S SUCCESS.

A writer in the agricultural department of the *Record Union*, in the course of a recent article, speaks as follows of the steady prosperity of the Golden State and its future:

We are now enjoying the golden season of the year, when the "Harvest Home" is sung in glad realizations of the bountiful blessings enjoyed from well-laden fields of grain and gatherings of fruit during the season just closing. Although there has been in some sections a lighter yield from various causes than in some previous years, the general outcome of the summer's productions has brought prosperity, and given continued reason for content in our highly-favored land. The practical demonstration to the people in the East of our natural resources and greatness by extensive exhibits of California grains and fruits at the Illinois State Fair and elsewhere beyond the Rocky mountains, has not only removed the quite general belief heretofore entertained there, that the reports of our productions were overstated and untruthful, but these impressions have been overcome and refuted by the official reports of State Fair Committees, who not only with entire willingness acknowledge all that we have claimed, and that the products of nature assert for us, but in their enthusiasm over the marvelous growth and quality of our cereals and fruits, officially say "the half has not been told."

The results which will flow from this, and the continued prosperity in all departments of industry in our State, will insure very soon a largely increased population, and with such increase will be a corresponding growth in values, demand for property, breaking up of large, neglected holdings and pasture ranges into small, well-titled farms and pleasant homes; greater demand for skilled labor, increase of employment on the farm and in the shop; greater perfection in educational facilities for all, and the full realization of the possibilities which Providence, by the bestowal of unequalled natural advantages, has intended for those who have pursued the fering goddess of "Westward, Ho!" to the final limits, and chosen their heritages within the borders of the Golden State.

The evidences of prosperity which are to be seen on every hand in the city and country are of the most substantial class, and form a natural step in the development towards the higher and advanced condition to be reached in our State life and history. The increase in the agricultural and horticultural industries of last year were alone a most notable feature, but the increase the present season beyond that of last will be upon a far more extended scale, and these will undoubtedly continue with higher ratio from year to year.

## VALUABLE LAND SOLD.

Last Monday J. W. Patterson sold to H. D. Ferson a piece of land containing fifty-four acres lying at old Rohle station, a mile and a quarter northwest of Durham and five miles from Chico. The price paid was \$70 per acre. We are told that any of the land in that neighborhood will command the same price.

Will it pay to raise grain on land at that price? Yes, with good farming and favorable seasons. But suppose the price of land should continue to rise, what then? Then the order of farming must change. The land must be applied to the production of something more remunerative than grain. The fact is, all the land around Chico and Durham and Dayton is most admirably adapted to fruit culture. Fruits of all kinds grow and bear abundant crops without irrigation. The day is now upon us when those lands must be so applied. Their present owners, as a general rule, prefer grain growing, but will begin to sell off in smaller parcels to those who prefer fruit culture. All that is now needed is for some one to make the start. General Bidwell is not selling off, but he is rapidly transforming his grain fields into orchards. These lands are worth \$70 an acre for grain growing, but are worth \$200 an acre for fruit culture. Some will smile at these figures, but we shall live to see them verified, and that within five years from this date.—*Chico Enterprise*.

## WOOLEN MILL.

A woollen mill and wool-scouring works, at Chico, are projected. It is rumored that several of our leading citizens will engage in the enterprise.

## FOOT HILL LANDS.

There is no doubt of it, the foot-hill lands along the western base of the Sierras are coming into favor, and will be more sought for in the future than they ever have been in the past, because it has been demonstrated beyond a question that they are proving to be the best lands in the State for the cultivation of fruits and vines, their flavor excelling the like products raised in the low and flat regions of the valley. It is understood that there can scarcely be a limit to the market that is offered for the product of the grape, whether in the form of wine, brandy or raisins, as no matter how fast vineyards increase, the demand for their crop and vintage keeps equal pace. The cultivators of the grape in California, have been learning some valuable lessons by experience. They at first sought moist lands to obtain a quick growth for the vines, but they in time learned that moisture deteriorated the flavor of the grape. Hillside lands, with irrigation, was considered the next step in advance, but irrigation makes the roots spread out laterally near the surface, and the irrigation must be kept up to insure the strength and growth of the vine. The latest and best experience is that grapes grown on broken, or hill land, without irrigation, have the best flavor; that the roots will go deeper seeking for moisture, and are stronger and healthier after a few years. (This being true the foothill lands will generally meet the necessary requirements, and offer the most desirable locations for vineyards that can be found. The red lands are found to be particularly good, and some contend that grapes cultivated upon them are to be preferred to those raised in other sections, and this fact must establish the reputation of the foot-hill lands for vineyards, and hereafter give them a money value they have not before possessed. It will not be many years before the value of the products of California vineyards will equal the present yield of the mines, and it will be a satisfaction to know that the region which first gave the State importance, by its yield of precious metals, can bestow equal wealth from another source of almost illimitable industry. Grass Valley Union.

## THE BONANZA KING MINE.

The *Calico Print*, published in Calico mining district, San Bernardino county, makes the following mention of this celebrated mine, located in the center of this notable mining settlement:

The center of the Bonanza King is simply immense. The fourth intermediate is opened 125 feet in the finest ore body without doubt I ever saw. In this drift and mine I can show any man \$2,000,000. I can take out \$10,000 a day with eight or ten men. The dumps contain half a million dollars. The ore house at the mine, and the ore bin at the mill are all full; the mill run but 20½ days for August, producing \$44,500. The mill is running beautifully now, producing \$2,180 per day—ten stamps, dry crushing—a record never equalled anywhere. Total product for year, so far, is \$144,820. I predict three-fourths of a million for 1883. If any mine in the west can beat it I am delighted.

## RISE IN LAND.

The following is from the *San Luis Obispo Tribune*: A few years since a lady in this county who had accumulated a little money as a school teacher, made the purchase of a small ranch in the fertile region of the Arroyo Grande. The investment aggregated \$3,000. After holding the property two or three years she sold one-half of it for \$4,000—being cautious and thus making sure of her investment—so she felt like resting easy with the remainder as all it cost and \$1,000 more had been returned. But during the past few months an offer was made of \$8,000 for what was left of the original purchase, which was accepted, and \$12,000 returned for the \$3,000 invested. The property had in the meantime been leased and returning a good rental, so there was no deduction of taxes, interest, nor insurance to take from the profit of \$9,000.

## FORTUNES IN TIMBER.

According to the *Shasta Democrat*, the timber belt along the Pitt and McCloud rivers, and the headwaters of the Sacramento, is being rapidly pre-empted. That paper thinks there are fortunes to be made in these regions, as soon as the railroad passes through, by those who get slices of the blue sugar pine.



## LETTER FROM BANNING.

The following, which we copy from the *Press and Horticulturalist*, published at Riverside, accords with our oft-repeated statements of this section of our own heartful State, therefore, we give it entire:

**EDITOR PRESS AND HORTICULTURIST:**—It has been said that all accidents are dispensations of Providence for the benefit of newspapers, and when, during a recent trip through our section, your old friend G. W. Bryant got me pledged to tell you something of our surroundings, I felt constrained to believe it was true.

The railroad traveler coming from the heated glare of the Colorado desert is always impressed by the striking contrast presented by this magnificent gateway of the Sierras, several miles in width—on one side the sharp peaks of Mt. San Jacinto, with its snow-capped walls of lava and detached patches of forest; on the other side the bare and lumpy granite mass of Grayback and San Bernardino; while between these giant walls are the two valleys known as San Geronimo Pass—and should the traveler chance, at sunset, behind these sentinel peaks he can not fail to witness a weird and impressive sight, when the western waves of eluding day light on their snowy crests with billows of purple flame. The Pass is traversed by the Southern Pacific Railroad. The western or mesa lands of the Pass are known as the Summit lands and comprise more than 12,000 acres of perhaps the finest grain lands in this State. Within the past year about all of this land (Government and railroad) have been entered or purchased by settlers, and during the coming season nearly all the entire area will be under cultivation in cereal crops. The soil is of the richest character, a ferruginous clay loam—friable, yet retentive of moisture. The barley grown is plump and bright in color, and eagerly sought for purposes of brewing, and though crops were elsewhere light throughout the State, here more than 35 bushels to the acre were averaged. These lands were, but a few years since, held as worthless—and under this impression were allowed to be entered at the Land Office under the Desert Act. They require no irrigation. Experience has demonstrated that by summer fallowing a full half crop is sure in seasons of drought. While water is found in most of the numerous canyons manifesting from the mountains, on the plains several are now boring for water and with good chance of success. At San Geronimo or Summit station excellent water was found at a depth of 130 feet.

The eastern or lower part of the Pass, where the railroad station known as Banning is situated, embraces about 7,000 acres. The soil is mostly rich alluvial loam of a sedimentary character. The elevation is nearly 2,400 feet above the sea level; and probably from this fact, with its close proximity to the Colorado desert, the configuration of the mountain ranges, and the distance from the coast, is produced a climate probably unequalled in the State. The mountain air is tonic and invigorating. This coupled with extreme aridity is the leading characteristic. From the heated column of air on the desert there is frequent though not unpleasant atmospheric change. A more perfect climate for the cure of pulmonary diseases, during the spring, summer and fall months, can hardly be realized. The winter months are colder and the wind sometimes more violent than in the lower valleys—and occasionally an old fashioned snow storm will serve as a reminder of other days—but through all is felt the essential characteristic of dryness and exhilaration. An occasional fog cloud will penetrate a part of the Pass though quickly dissipated. The thermometer will show in February sometimes about 25 degs. F., and in summer may reach even 102 degs. F., but these extremes are rare indeed. The experience of the writer, who has resided here upwards of seven years, may be worth mentioning in this connection. Suffering for many years from pulmonaryis with accompanying hemorrhages, and recovery despaired of, he has sought in vain relief in Montone, Funchal, Florida, Aiken and other resorts, and has by residence here been restored to comparatively sound health. Due can spend nearly every day in the year out of doors, and find, in immediate proximity on the mountains or desert, any temperature desired. Many others have here been restored to health. The amount of rainfall is generally from nine to fourteen inches, enough to ensure an average crop.

Recently a large tract of land with water right has been purchased here by Messrs. Pitkin and Bryant, of Riverside, for purposes of colonization. The water right (San Geronimo creek) is one of the most valuable in the State. There is a constant flow of from 250 to 300 inches, and this can be largely augmented by easy development. This stream has, for several years, been in part used for fluming wood from the mountains. The water is of the finest quality, cool, soft and pure. The tract of land is of excellent quality, and can be readily irrigated. It has been demonstrated that (from the volcanic tufa or soil, and the exceptional

dryness for curing and earliness in ripening), finer raisins can be easier made here than elsewhere. The land and climate are specially adapted for the culture of the wine grape. The celebrated vineyard of Dr. Edgar is near here, said by Nordhoff to produce the best wine he had tasted in California. The winter is too severe for the successful growth of the citrus family, but most of the deciduous fruits grow well—especially pines, plums and apples, which cannot be profitably grown in the lower valleys. The peach and apricot have here an unequalled flavor. During the past season fully 25,000 sacks of grain have been grown here and will be shipped from Banning. The advantages for a successful colony are beyond comparison with many other places. Pure and abundant water, excellent soil, facing mountain air, a ready market at the railroad depot for all products, being the nearest cultivated section of this country to Arizona, a large grain producing region surrounding assures prosperity. There is abundance of firewood and timber on the mountains near by. There are post and express offices, good district school and church organization. The judicial township of San Geronimo has existed for several years, and extends from here to the Colorado river. Altogether those who best know this promising region predict a great future for this new settlement. There are no government lands open for settlement, though a few remain of railroad lands. WELLINGTON MURRAY.

Banning, San Geronimo Pass, Oct. 16th.

## THE FIG BUSINESS.

One of the rising industries of this section is fig culture. Until recently figs were a drug on the market, as there was but a limited demand for that fruit. But this season the circumstances have been purchasing all they could at paying prices. Our neighbor, James Stewart, owns an acre planted to fig trees which he had been thinking seriously of digging up, as they had proved unprofitable, but as good luck would have it, he did not do, and the result is that this season he has sold \$300 worth of figs from that one acre and there is still \$100 worth of fruit on the trees. Our friend has decidedly changed his mind concerning the fig business.

Mr. Hutchings, who owns a small farm in the suburbs of our town, has had like satisfactory results from the few fig trees on his place. From five trees he has sold this season \$35 worth of figs. At that rate an acre of figs would yield about \$700. Los Angeles county is still in her infancy so far as the development of her resources are concerned. Every season a dozen or more paying enterprises are developed. In a few short years our country will be known far and wide as the banner county of the State and the garden spot of the world. *Downville Signal.*

## A LITTLE BONANZA.

Last week a rich pocket was struck in the Iowa mine at Sutter creek, adjoining the Mahoney on the east. The mine has been operated, on a small scale, by A. Tibbetts and J. Tucker, the owners, with varying results. Last week they stumbled across a little bonanza, taking out in a short time a quantity of gold reported to be worth all the way from \$12,000 to \$17,000. Tibbetts well deserves the good fortune that has so suddenly dawned upon him. With limited capital and in face of difficulties that would have staggered most men, he has stuck to his mine, maintaining the utmost confidence in its resources. The discovery can hardly fail to encourage the further development of the Mahoney. *Anadior Ledger.*

## IMMENSE YIELD OF GRAPES.

G. Groezinger, of Yountville, had this year, on one small tract, the largest yield of grapes we have ever heard of. It is a triangular piece, containing 4,050 vines, all of which was picked, by correct account, 69 tons of grapes, reserving 50 vines for family use, and besides about a ton destroyed by chickens. Seventy tons are 140,000 pounds, which divided by 1,000, the number of the vines, makes nearly 140 pounds to the vine. We do not know how many acres these particular vines make, but as the range is from 800 to 1,000 per acre there is probably about 1/3 acre, which would make a yield of over fifteen tons per acre. The variety is the Frontignan, and the value of the 1/3 acre crop is about \$2,100. *St. Helena Star.*

## BUTTE CREEK GOLD DUST.

It has been some time since anything like a good display of gold dust was made from the Butte creek claims, but a miner deposited near two thousand dollars' worth of nuggets in the Bank of Butte County this morning, the result of a small clean-up. He says that not much is doing in the mines at present in account of the severity of winter, and "outside claims" are not being worked at all. *Chico Record.*

## HIGH PRICES.

A subscriber in Lynn, Massachusetts, writes that California raisins are selling there at fifteen cents per pound and it is hard to find them at any price; plums two cents a piece and apricots thirty-five cents for two-pound cases. *Oakland Fruit Grower.*

## W. M. BRANDON &amp; CO.

314 Kearny Street, Telephone No. 231, 3 bells  
SAN FRANCISCO.

**REAL ESTATE AND FARMING LANDS BOUGHT,** sold and exchanged on commission and private account. Alameda, Fresno and Tulare irrigated lands with water rights a specialty. Horses rented and rents collected. Money loaned.

**\$4,500.** 120 ACRES, ONE AND ONE HALF miles from town and railroad depot; soil a fine black loam; 60 acres level land, balance rolling; first-class house and good barn; 500 choice fruit trees and family vineyard; plenty of timber; a fine front stream runs through the place; a pair of mules, 2 cows; a lot of poultry, and all necessary farming implements are included in the price. W. M. BRANDON & CO., 314 Kearny street.

**\$2,500.** 71 ACRES IN SONOMA COUNTY, 2 miles from depot and post-office; 34 acres is perfectly level, balance gently rolling; wood well, particularly adapted for fruit; 2 acres hops; vineyard and orchard; and fine climate; 400 cords of wood cut and ready for hauling; plenty of standing timber, which will more than pay for the place; common house five rooms; barn and out-houses; 2 cows; 4 good work horses, with their harness; 1 four-horse wagon; 1 live-horse wagon; 1 spring wagon; 1 cultivator; 1 harrow. W. M. BRANDON & CO., 314 Kearny street.

**20 ACRES AND UPWARDS—1600 ACRES FINEST** fruit, grape or farming lands in the State; all rich, level land, and plowed ready for planting; we sell on small yearly installments, cheap land any crop that may be desired, as it can all be irrigated. No house or barn on the place. W. M. BRANDON & CO., 314 Kearny street.

**\$6,000.** 450 ACRES IN TULARE COUNTY near Tulare City, situated in the arid section, entirely free from alkali; will raise any crop that may be desired, as it can all be irrigated. No house or barn on the place. W. M. BRANDON & CO., 314 Kearny street.

**\$9,000.** 148 ACRES IN NAPA COUNTY, 2 1/2 miles from Napa City; good hard finished house of 9 rooms and bar cellar; barn; windmill; tank; and other outbuildings; 25 acres of vineyard, foreign varieties orchard of choice trees; all good land fenced into 5 lots, terms easy. W. M. BRANDON & CO., 314 Kearny street.

**\$1,000.** 210 ACRES IN NAPA COUNTY, 1 mile from Napa City, all fenced; new house and barn; with a plentiful supply of water. This ranch is now used for dairying, but a large proportion of the land is subject to cultivation, and being absolutely free from frost is excellent for orchard or vineyard. W. M. BRANDON & CO., 314 Kearny street.

**\$9,000.** 160 ACRES IN SONOMA COUNTY, one-half mile from school and only three miles from railroad depot and post-office; all good land mostly level; balance gently rolling, all fenced, except 10 acres which is pasture; good orchard and 30 acres in vineyard; house, barn and outbuildings, plenty of water; 2 horses, 1 wagon, all necessary farming tools; 10 tons of hay and a quantity of poultry go with the place. W. M. BRANDON & CO., 314 Kearny street.

**\$20 PER ACRE.** 4,000 ACRES; THE FINEST stock range in the State, near Visalia, in Tulare county; fenced; has six houses and barns on it, all choice lands, with unexcelled water rights, and for fertility can not be surpassed. W. M. BRANDON & CO., 314 Kearny street.

**\$5,000.** 20 ACRES, ALL HIGHLY FERTILE, well watered, in Tulare county, within one mile of Visalia, 30 acres in alfalfa, fine vineyard and orchard, all well fenced, water rights deeded with the place; good house and barn; A No. 1 soil; there is good timber on this ranch. W. M. BRANDON & CO., 314 Kearny street.

W. M. BRANDON & CO.,

314 Kearny Street.

## FOR SALE.

## A FINE RESIDENCE

—OF 16 ROOMS, ON—

Clay St., bet Franklin and Gough.

Also one of 9 rooms on Folsom street, between Twenty-first and Twenty-second.

Twelve lots in Bay View Home-stand Association.

Lot on Twenty-seventh avenue, adjoining Point Lobos road; 70x120 feet.

One hundred and fifty thousand acres land in Tom Green county, Texas.

## 5,000 ACRES

Alfalfa, Orchard, and Vineyard Land

—IN—

## FRESNO COUNTY,

—NEAR THE COUNTY SEAT—

At \$10 Per Acre.

For particulars apply to

ROBERT PERRIN.

402 Kearny Street, - San Francisco.

## COMMERCIAL

## INSURANCE COMPANY

OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, June 30, 1883, \$390,524.06

Losses Paid Since Company was Organized, \$906,379.13.

JOHN H. WISE, President  
CHAS. A. LATON, Secretary

## OFFICE.

No. 405 California Street, S. F.

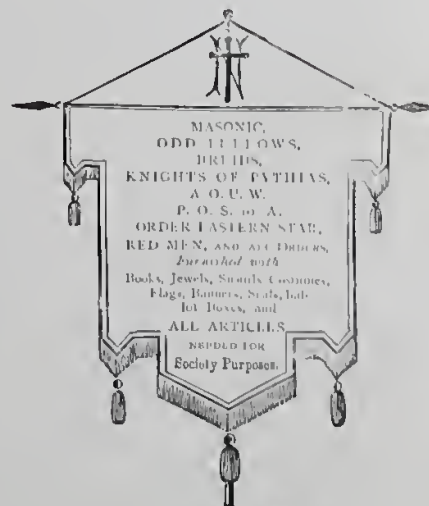
Established by Daniel Norcross in 1849.

## NORCROSS &amp; CO.,

MANUFACTURERS AND IMPORTERS OF

## REGALIA, PARAPHERNALIA, ETC.

MILITARY GOODS, FLAGS AND BANNERS.



KNIGHTS TEMPLAR COSTUMES A SPECIALTY

NO. 6 POST STREET.

Masonic Temple,

San Francisco.



People from abroad are coming among us. Let us treat them well and welcome them. If the particular piece of property we want to sell them does not suit them, refer them to our neighbor, who has property. Let us not, any of us act like the dog in the manger, but let us be big-minded, liberal-hearted, and welcome the very desirable class of people who are coming among us to ineptible homes. There is room enough for us all while this generation lasts. And while we live and our lots are cast in such pleasant places, let us evince a disposition to share it with our fellow-mortals. There is enough here for us all, and for the stranger who may sit at our board."



## A FERTILE SPOT.

As fertile land, as genial climate and as beautiful scenery as are to be found anywhere in California, can be found in the little nooks and valleys with which the ranges of mountains in and surrounding Napa county are broken. Many of these are in the "thermal belt," and have a climate in which anything can be raised native to either temperate or semi-tropical regions. Their healthfulness is unsurpassed and the farmers who inhabit them are as happy and prosperous as the majority of tillers of the soil. Concerning one of these spots, and not an exceptional one, the editor of the *Dixon Tribune* writes as follows:

"During a recent trip up Putah Canyon, we called to see an old Solanoite, Geo. O. McKinley, who has settled on one of the many little valleys that nestle at the base of the precipitous mountains of that tortuous pass. He is located about eight or nine miles west of Winters, and a short distance over the Napa line. Mr. McKinley has about forty acres of tillable land, that can produce anything in the fruit, vegetable or cereal line. He has a field of the finest Spanish corn we have seen during our residence in California. He also has a small field of pop corn that is very prolific, several stalks bearing as many as eight well-formed ears. His melons are in splendid condition, his young fruit trees are growing finely, and strange to say, he has never been bothered by pests or insects. Mr. McKinley is thinking of experimenting with blackberry vines, and we have no doubt that he will be successful."—*Napa Register*.

## ANOTHER FOOT-HILL FARM.

Less than two years ago Mr. H. P. Ford took up a piece of school land on Chico creek, some sixteen miles above Chico, and began to make a home. In connection with a stock range he set to work to have a garden and prepare for an orchard. Last Spring he opened a spring whose waters came oozing out from the hillside, and now has a flash stream of water flowing by his house, enough to irrigate a large garden. His melons last Summer astonished some of our town people who were favored with specimens of them. And now we have in our office a specimen of evergreen millet grown on the place, which is upwards of seven feet high and headed out in full. The general crop which has not gone to head is now ready to cut for hay. The millet has grown and suckered out astonishingly, and stock eat it eagerly.

Here is another illustration of the possibility of making good homes on little foot-hill ranches. It is not in the amount of space one occupies, but the use which is made of it—the productions which can be grown. When every comfort and luxury can be gathered about one's home within the space of a few acres, is it not better than broad acres of a large ranch with neither comfort nor luxury, strictly speaking, to be had for either labor or money? Home—home—a home with life's beauties and earth's good fruits surrounding it. May the day come speedily when our foot-hill country shall be taken up and applied to such homes as it is capable of making.—*Chico Enterprise*.

## GOOD RESULTS.

A. J. Twogood, of Riverside, during the past season netted \$3,000 from an orange orchard of six acres, and Cover & McCoy sold their crops on the trees from a six-acre orchard that had not yet come into full bearing for \$1,950 and afterwards sold their place of twenty acres, set to oranges, apricots, grapes etc., for \$19,000. The purchasers expect to clear this season twenty per cent. on their investment. Raisin vineyards netted their owners all the way from \$100 to \$300 per acre, and in some cases as high as \$500 worth of raisins have been sold from a single acre. The following gentlemen can be referred to, if necessary in connection with this raisin business, viz: Mr. Catter, Sweet & Norcross, J. G. North, A. P. Combs and others of Riverside. The older settlers in this section of the State appear to have the most confidence in its resources and most readily pay good prices for land.—*Riverside Press*.

## AN ARTESIAN WELL.

The *Napa Reporter* says that a well sunk on the tule land a few miles below Napa, a few years ago, struck a flowing stream of water rising two feet above the ground. The water is pure and sweet. Wonder if the same thing could not be done on the tule land about Suisun?—*Solano Republican*.

## CEMENT DEPOSITS.

A writer in the *Daily Chronicle* of this city says: It may not be generally known that there are large deposits of cement in California in the immediate vicinity of railroads, which could be turned into sources of great wealth, if a satisfactory process of burning it could be discovered. A few years ago a company undertook the manufacture of cement. They secured a large deposit of the mineral near the town of Santa Cruz and erected works, spending in all about \$75,000; but the material which they manufactured was not of a satisfactory quality, there being some practical difficulties concerning the burning of the rock, which in its chemical composition differs slightly from that found in the East. The company was finally compelled to cease working and since then no effort has been made to turn these valuable deposits to account. Experiments, however, are still being carried on, and these have demonstrated that first-class cement can be made out of the Santa Cruz rock. A member of a milling firm in this city, who is deeply interested in the matter, recently burned some of the rock in the grate of his office. Unfortunately, he did not watch it closely enough to notice the exact conditions under which the process was conducted, for when he tried the product afterwards, he found that he made a superior article of cement, which hardened readily under water. Since then he has vainly attempted to repeat the experiment.

## A GOOD WORK.

The American Forestry Congress has just closed another important session at their annual Congress, which was held this year at St. Paul, Minnesota. The cheering news was given to the Congress by the President, Hon. George B. Loring, of Massachusetts, that by the agitation of the subject of forest culture for a few years past a great work was going on in the land in restoring a portion of the country back to forests. So active is this work in New York, Ohio, Maine and many of the northern States that the area of forests was absolutely increasing, and the good work kept going right onward. In Los Angeles there has not been as much attention paid to forest culture during the past year as there should have been, but we discover a little more interest being awakened during 1883. Judge Ranney, of Florence, we observe, has 200,000 eucalyptus trees that he is preparing for forest uses. With his grand flowing well of 50 inches, the Judge can plant this kind of a tree at any period of the summer, and we hope that he will set his neighbors an example by planting a beautiful grove of this most valuable tree. There should be a million of these trees planted during this year in the county. All the county roads should be lined with this rapidly-growing and beautiful tree. What farmer will start the ball first.—*Los Angeles Herald*.

## QUARTZ IS THE THING.

The *Forest City Tribune* says: The promise is now that a new era in quartz mining interests is about dawning for Sierra county. In every direction men are now smiting the jutting rocks of the mountains, and delving beneath the red surface, scanning each good looking lump of quartz, to find continuations of the rich veins which are now being worked and have been worked in the past. In all parts of the county prospectors continue to develop croppings. Quartz is the thing. It is more substantial than any other character of mining. A quartz ledge in Sierra county, having once proven good, has never, we believe, given out if properly followed.

## A GOOD PURCHASE.

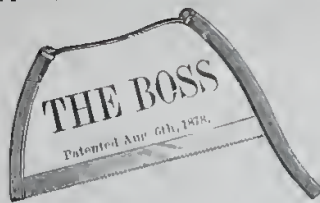
Last year T. C. Barnes of Nelson, purchased a tract of land, already summer-fallowed, for \$26 an acre. Four acres of it he plowed and applied to other uses. On six acres he cut hay, which brought him \$210, or \$30 per acre. From the remaining 70 acres he has this season harvested 1,391 sacks of wheat, averaging 135 pounds to the sack, which he has just sold at \$1.15 per cental. At this rate the land pays for itself the first year, with a surplus of \$832. This, without taking expenses into account. With such figures for this year, we are not surprised to be told that the price of the land advances from \$26 to \$40 or more in a year with the tendency still upward.—*Chico Enterprise*.

O. P. SHEFFIELD. J. PATTERSON. N. W. SPAULDING.

## PACIFIC SAW Manufacturing Company,

17 & 19 FREMONT STREET,  
SAN FRANCISCO.

## A NEW WOOD SAW!



THE LATEST, THE BEST.

The above illustration shows an AUTOMATIC SELF-STRAINING WOOD SAW FRAME. The saw is strained by means of a Steel Spring secured to the wood end pieces with Metal Bands. With this device a saw is perfectly and automatically strained at all times. No cross bars or braces are required to give stiffness to the frame. The space in wood saw frames usually filled up with such devices is left open, giving the saw greater capacity for sawing large sticks of wood, wide planks or boards. There is no screw straining rod to get out of order.

Price, complete with Pacific Saw Mfg Co's Extra Quality Blade, set and filed, ready to work, each, \$1.50; with first second quality blade, set and filed, ready to work, \$1.25; with imported blade, set and filed, ready to work, \$1.00.

A LIBERAL DISCOUNT TO THE TRADE.

AGENTS FOR C. B. PAUL'S  
CELEBRATED FILES.Planing Knives, Currier Knives, Saw  
Mandrels, and Saws of Every  
Description Made to Order.THE CALIFORNIA  
POWDER WORKS.

**Santa Cruz Gunpowder.**

**HERCULES AND MINING POWDER.**

**SUPERIOR SPORTING POWDER.**

**Sea Shooting, Valley Mills.**

**Pacific Rifle and Pistol Powder.**

**ROUND GRAIN, Bright Glaze, in Iron and Wooden Cases.**

**SHOT, CAPS, WADS, AMMUNITION, FUSE, Etc.**

**PRINCIPAL OFFICE, No. 230 California Street, SAN FRANCISCO, CAL.**

**STOCKTON**

*Business College*

**F. R. CLARKE, Principal.**

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the Year. Tuition is less than on any other school. Excellent board \$10 per month.

**COURSES OF STUDY:**

Full Business Course, Full National Course, Review Course, Spelling Course, Telegraphy, Arithmetic Course, Languages.

The *CONDOR JOURNAL*, containing full particulars sent postpaid. Address: F. R. CLARKE, P. O. Box 15, Stockton.

## EDGE HILL

VINEYARD, WINE CELLAR AND  
DISTILLERY.

Near St. Helena, Napa County, California.

SCHEFFLER'S CELEBRATED VACUUM DISTILLED

## SANITARY BRANDY

—AND—

Brands of Red and  
White Wines.STANDING COMPARISON WITH THE  
FINEST BRANDS OF IMPORTEDBurgundy, Bordeaux and  
Rhine Wines.Orders Received and  
Promptly Attended to by

WM. SCHEFFLER,

PROPRIETOR.

HOME MUTUAL  
INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY.....1883

## FIRE ONLY.

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold, - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

## OFFICERS:

J. F. HOUGHTON.....President.  
J. L. N. SHEPARD.....Vice-President.  
CHAS. R. STORV.....Secretary.  
R. H. MAGILL.....General Agent.

## J. D. SPRECKELS &amp; BROS.,

Shipping and Commission Merchants,

HAWAIIAN LINE OF PACKETS,

325 Market Street,

SAN FRANCISCO.

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the

## STANDARD SYRUP,

A SUPERIOR ARTICLE.

Put up in Barrels Expressly for Home Consumption.

ALSO,

## EXTRA HEAVY SYRUP,

In Barrels for Export.

## REFINED SUGARS,

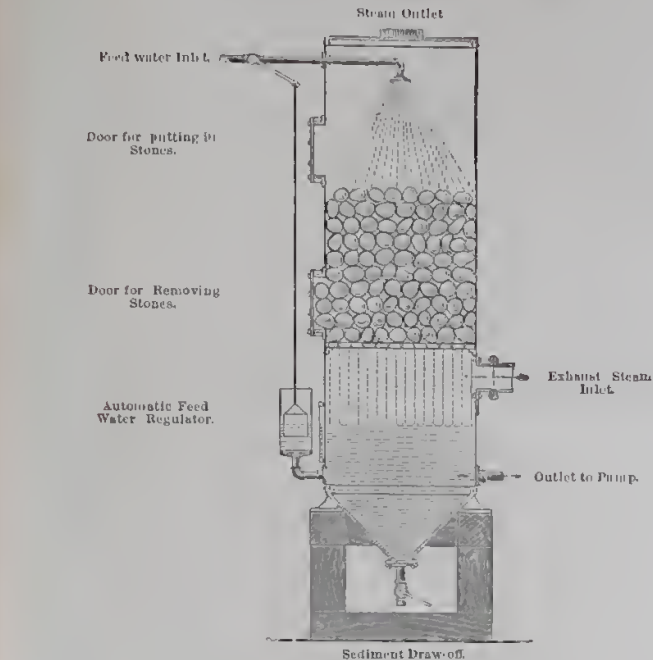
At Lowest Market Rates.

Office 325 Market Street, Up Stairs.



**LLEWELLYN FILTER-HEATER,**

Patent Issued Aug. 12, 1879, Re-issued Aug. 1, 1881.

**For the Prevention and Removal of  
STEAM BOILER INCRUSTATIONS  
WITHOUT THE AID OF CHEMICALS.**

Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent. of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.

Further particulars with full descriptive circular and price list can be obtained at the office of the

**LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,**

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufacture, Columbia Foundry, 133 and 135 Beale Street.

**The California Lloyds****FIRE AND MARINE****UNION****INSURANCE AGENCY**

OF

**HUTCHINSON**

&amp; MANN,

Nos. 322 and 324 California Street  
and 302 and 304 Sansome Street,**San Francisco.**

Agents for The

Agricultural Insurance Co., New York,  
\$1,521,630.Fire Ins. Ass'n (Limited), London, Eng.,  
\$1,573,291.General Insurance Company, Philadelphia,  
\$1,208,645.New Orleans Ins. Ass'n, New Orleans,  
\$573,216.St. Paul F. & M. Ins. Co., St. Paul, Minn.,  
\$1,048,673.Standard Fire Office (Limited), London, Eng.,  
\$1,300,000.Tentonia Ins. Co., New Orleans,  
\$418,045.**MARINE.**The London and Provincial Marine Insurance Company, London,  
\$6,278,362.La Fonciere Marine Ins. Co., Paris,  
\$2,250,000.

Capital Represented, \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. L. CHALKERS,

Special Agent and Adjuster.

**SMALL FARMS IN THE MAJORITY.**

The day for farming on a large scale in Napa county has passed by, there being only a few ranches in cultivation that will comprise a section of land in area. In Berryessa valley there are few farms of large extent, but as a rule subdivision of tracts is now the order of the day. There are 268 holdings in the county ranging from 400 to 600 acres in extent, but these are chiefly grazing mountain lands, not susceptible to cereal production, although some portions may be adapted to vineyard purposes. The division of lands is shown in the fact that in 1880 the census enumerators returned 897 farms in the county, while by the report of the County Assessor, just rendered, there are now 1773. This is an increase of nearly one hundred per cent in three years. Now this subdivision of the land affects its value may be seen at a glance by the following figures: Of the land which is included in tracts of less than 10 acres the average assessed value is \$84.81 per acre; over 10 acres and under 40, \$48.61 per acre; over 40 and under 60, \$35.96; over 60 and under 100, \$25.81; over 100 and under 160, \$11.89; over 160 and under 240, \$14.44; over 240 and under 320, \$9.48. Land which is subdivided into small tracts is generally planted in orchards and vineyards, and the great resulting increase in value goes to swell the aggregate wealth and prosperity of the State.—*Napa Reporter.*

**A RICH STRIKE OF SILVER ORE.**

The signs are encouraging for opening silver mines near Calistoga of considerable richness, and Mr. Multer, of the Calistogan, has held to the belief for years that paying argentiferous ores would be struck in the mountains on the east side of the valley, where prospecting has been going on for quite a length of time. He gives the following account of a rich strike made in King canyon a few days ago. It was made in the shaft near the creek of Old Discovery ground, work in this shaft having been carried on during several weeks past. Here the Palisade vein has been cut to a depth of seventy feet or more, and very rich ore, and plenty of it, found. This makes the second vein of good ore found in the Old Discovery claim, and the last one this prospect seems to be even richer than the other one in which work has been progressing several months past, and which alone is enough for any mine. The last strike, however, greatly increases the value of this property which will be long, in our humble opinion, surpass any silver mine heretofore opened in California. It is, indeed, almost a bonanza. If any two men have bright prospects for wealth, it is Grishy & Johnson, sole owners of the property.—*Napa Reporter.*

**A VALUABLE MINE.**

A correspondent of the *Mining Record* of this city, writing from Amador county, recently, thus speaks of one of the great mines of that county:

The Plymouth Consolidated owns two mills, one of eighty stamps and one of forty stamps or 120 stamps in all, and has the best plant on the coast. The mills are in first-class condition, equipped with Frue concentrators, and everything needful to successful and economical work. There are three shafts, one recently constructed, and to be the finest in California. It is perfectly vertical, with three compartments and splendidly timbered. It is 1,400 feet in depth. The mine is fully open and able to keep its entire mills at work. The first dividend was declared in June, \$50,000, and the second is now payable of similar amount, being fifty cents per share on the capital stock. After paying this dividend, the company have on hand a supply of over \$100,000 cash. The rock is a ribbon quartz, running twelve to sixteen dollars per ton, and the ore body is very large.

**SIERRA COUNTY.**

Now, there is no better locality in the world for people to invest their money in quartz than this county. There is as favorable a geological formation for rich deposits as in any other place under the sun. There are belts of serpentine, granite and limestone like great ribs of the earth, so to say, and resting against and in the vicinity of these belts are the most favorable localities for rich deposits to be found, according to all theory and experience. What is wanted are practical men, to go down, start with an axe or a small cheap mill; they can find the veins. Find whether you have a paying ledge on the most inexpensive plan, and if you have a good property you will find eager purchasers, for there is plenty of idle money below; or keep the mine and put on more extended and expensive machinery yourselves, and depend upon it, the dull times that have so long been felt in the past few years will rush like mist in the morning from old Sierra county. *Barreille Messenger.*

**CONCERNING SMALL FARMS.**

We are pleased to see that the advocacy of small farms is becoming popular with the press and people. Commenting on the probable benefits to result from the subdivision and sale of Central Pacific Railroad lands, the *Oakland Times* says:

We are told that many sons are upon the heads of railroad men. If they hold their grants subject to sale in small tracts to actual settlers they will prove to have been trustees of the State's future prosperity, and the grants which we all opposed will prove to have been a deposit of lands beyond the reach of the large holders to be produced at last for the home making purposes of a great rural population. Allover the State are lands laying vacant, unconsidered and profitless, which in the hands of an Western population and under such a sky as ours would be eagerly sought and put at production to support happy homesteads. If the railroads are determined to do what they can to domesticate here this American system of small farming as against the unhappy English system of great estates, let every citizen do what is in him to help the policy along. Under the small farming system there would be good bunches of cattle and hogs on every farm and poultry galore, all of it healthy and far fitter for food because it would be in small lots and would get better and kinder attention.—*San Francisco Bee.*

**A COMPETENCY QUICKLY ACQUIRED.**

In the spring of 1880 Mr. W. S. Cunningham arrived at Lemoore and purchased 21 acres of land one mile north of that place at \$30 per acre. Having but \$500 in all he was compelled to give a note and mortgage for \$250 of the purchase price, paying interest at 18 per cent per annum. He had no time and not so much as a chicken in the way of stock for his ranch. He possessed a thorough business training, plenty of native grit, and a wife who, though entirely unused to that kind of life, could roll up her sleeves, make butter, raise chickens and preserve fruits. This worthy couple have paid for their land, have just completed one of the snugest little cottages in the county, at an expense of \$1100; have purchased \$600 worth of furniture for it; have fenced the land and cross-fenced it with a substantial board fence; have fully \$500 worth of live stock on the place; and an orchard of 700 trees just coming into bearing. It is every whit paid for, too, and they have some money besides. To be sure it has not all been made off from the farm, though most of it has. Mr. C. worked upon the construction of canals and ditches during a portion of the first year at \$30 per month, and he has made something out of a nursery with which he has been connected, but his principal source of income is fifteen acres of alfalfa and the stock it feeds.—*Valley Register.*

**WE MOVE.**

Remote as Santa Barbara is from railroad commination and rapid transit, this county is progressing at a rapid rate. Land is being sold at prices which five years ago would have been considered preposterously high. The population is steadily increasing and the beauty about the increase is, it is of a class which brings wealth, industry and refinement with it. Our large "ranchos" are being subdivided and sold off into small farms more rapidly than in any other county in the State except Los Angeles. Large dairy interests are being built up in the hitherto considered inaccessible Sisquic region. The more affluent residents are importing the finest of live stock into the county at great cost, and improvements are seen in all directions. Santa Barbara is on the verge of a "boom." Not a feverish fictitious rise in values but a substantial bursting forth into full bloom of the hitherto dormant resources of this region heretofore so little known to the outside world. *Santa Barbara Press.*

**WINE GRAPES.**

The Bickling is a heavy bearer, but requires at least five-foot stakes and long pruning. The same variety of pruning is being followed with success in some instances with the Chasselas. The Chasselas Fontainebleau is also a good group, but the objection to that is that it suckers badly. Crab's Black Burgundy, as a claret grape, probably surpasses the Zinfandel in the quantity of wine, but is not so prolific, nor has it been so generally tried. In Napa Valley, however, it seems to be exceedingly well, and is becoming very popular. In the southern portion of the State there is a wonderful run on Sultan, far beyond the wants of supply. It is owing to the fact that the Sultan has been found to make a good white wine, and is also a good red grape. Last year Mr. Blowers sold his cuttings at a good figure, and could have sold half as many had he had them. The same is true of Mr. Crab's. The cuttings are high and hard to get.—*Cur. S. P. Bulletin.*

Subscribe for THE RESOURCES OF CALIFORNIA

**THE CALIFORNIA LLOYDS,**

(Established in 1861).

**FIRE AND MARINE**

Paid-Up Capital, \$750,000

PRINCIPAL OFFICE,

Nos. 416 and 418 California St.

Agencies in all the Principal Cities of the United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary

C. P. FAIRFIELD, General Agent

GEORGE T. BOHEN, Surveyor

**PRESCOTT & CO.,**

PROPRIETORS OF

**Queen City Market,**

DEALERS IN ALL KINDS OF

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Cheapest Eastern Hams, Bacon, Lard and Foreign Sausages of all Kinds.

CORNED BEEF AND PORK FOR SALE BY THE BARREL.

1154 1158 Market St., and 6-8 Taylor St.



## WHAT IS AND SHOULD BE.

California is enjoying a new era of prosperity, and the tide of emigration that is pouring into the State remains one of the steady flow in this direction in the golden days of '49. Los Angeles is not alone in her prosperity. It is general to almost every direction throughout the State. Oakland is growing steadily and healthfully, wisely building up manufactures and home industries in her midst, which shall afford occupation and means of livelihood to those who come to settle in her midst. It is estimated that the population of Oakland increased at least five thousand last year, and that San Francisco grew in the same proportion. People at the East are restless as never before. They are tired of the climatic severities and atmospheric disturbances known to the wide extent of territory beyond the Pacific Slope. The terrible storms which have recently occurred in various parts of the country have turned the attention of a great many heretofore indifferent to this region in the direction of the Golden State. A letter just received by the *Times* from Nebraska voices the general sense of uneasiness that is felt in the States that have been in the track of the terrible cyclones that have wrought such devastation along their path. The writer says: "We live in a state of constant terror and dread of tornadoes. Every black and threatening cloud is the signal for alarm. We have several times taken refuge in our cellar when the clouds indicated the approach of a storm of unusual severity, and remained there overpowered by a sense of our helplessness in the case of a severe wind-storm striking us. We are thinking about California. A country not liable to be visited by these destructive cyclones seems to us like a paradise."

Such people want information relative to soil, production, stock-raising, climate, irrigation, labor-demand, markets, timber, manufactures, cost of living, price of lands, etc. They want to know something of the different localities of the State, and what each has to offer. Perhaps about no section of this great State does there center at the east so much of romantic interest as about the orange groves and vineyards of Los Angeles. To the young men and women of the Atlantic States it is the land of romance and poetry, where, amid fadeless orange bloom, they would love to make their home. To the invalid it is the land of eternal summer, where amid unending sunshine and balmy breezes they shall find health and healing. To the man of business, it is a region of active enterprise and of possible successful achievements, where capital may be readily invested and realize a large percentage of profit. To the agriculturist it is a region where a long winter comes to consume the fruits of the summer's labor. To the poor man, with a family to support, it is a country where a large share of his hard-earned means will not have to be consumed in the purchase of fuel to keep the little ones from freezing, lessening materially the sum which remains for the purchase of other necessities and comforts of life. To the capitalist it is a section where real estate is active, investments safe and profitable and golden fortunes in the future. The man of ease and leisure sees in it a spot where existence is attractive—where all the climatic conditions tend to comfort and cheerfulness. Each of these classes finds in this portion of Southern California the attractions that they most desire, and here the conditions exist that will be satisfying to them all. We only need more concerted action in making known these important facts to bring in hundreds of all these classes to settle in our midst. Los Angeles county should wake up fully to the fact that it would be better for us individually, better for the community and the State at large to diminish the number of our vast ranches, and curtail the immensity of our wheat crops and stock herds, and do what we can to turn in this direction, even more largely than now, the tide of immigration; to increase the number of our small farms; to develop new industries, and to give more attention to the culture of all the most valuable and profitable productions for which our climate and soil are so peculiarly adapted. In place of isolated ranch houses we want hundreds of intelligent and happy homes dotting our valleys and hillsides, and in the place of importations we want our manufactures, with all their accompanying helps to growth and a larger prosperity. Every legitimate means of advertising should be made use of. Send home-papers abroad. Let your letters to the East convey intelligent statements in regard to all the varied interests, resources and industries of the section, and in addition let us work and plan intelligently and wisely to make our coming fair a true exponent of the agricultural and fruit interests of this district. The unanswerable logic of results will convince the most skeptical of the truthful uses of all that we claim for Southern California.—*Los Angeles Mirror*.

## PLANTING TEN ACRES FOR THE HOME.

An experienced horticulturist writes to the *Rural Californian* as follows:

Just for home use, an acre or two should be planted to a miscellaneous assortment of best varieties of fruit trees and small fruits. I would say 50 apple-trees, two-thirds winter varieties; 25 pear, of varieties ripening in succession, 50 peach, commencing with the earliest and ending with the latest, 10 each of nectarine, plum, apricot and fig; 5 English walnut, 5 Italian chestnut, 10 budded orange, 5 budded lemon, 2 lime; one-fourth acre in blackberry, raspberry, currants and strawberries, rooted grapes for the table, carefully selecting the best varieties; also a few dozen seeds for profit. I would plant the remaining eight acres to Royal and large Early apricot, two and one-fourth acres to Bartlett and Winter Nellis pears, principally Bartlett, one-acre of best canning varieties of peaches, one acre to French and Hungarian grapes, about equally divided, and an acre to best budded varieties of orange and lemon, 1 two-thirds orange. Without entering into the argumentative merits of the above, I believe those who plant about as thus indicated, will have no cause for regret.

## A GROWING SETTLEMENT.

We take the following extract from a letter written by a resident of Redlands, a new settlement in San Bernardino county, to the *Riverside Press and Horticulturist*:

Nothing special having been heard from this settlement since the summer began, perhaps a few lines regarding the general run of affairs may be of interest to at least a portion of your readers. During the last spring about 150,000 navel grape vines, also many thousand orange and deciduous trees, were planted here, seven-eighths of which are doing finely and making good growth as could be expected. Grasshoppers, which are a pest in so many localities, and which we were troubled with to some extent last season, have worked no injury to the settlement this year, with the exception of some half dozen places on the outskirts. Had we known as much about this matter three months ago, as we do now, no one would have reason to complain. Flumes for irrigating are fast coming into general use, any other kind of ditch being considered as merely temporary, and a useless expense. Without flumes water is unnecessarily run to waste, and much more time and labor, which mean money, are required to do the work. There are now some twenty-six houses in Redlands, besides barns, sheds, etc., and more buildings will be erected the ensuing fall and winter. Our population exceeds over 100 actual residents, and we are fast getting into the ways of an old well established town.

Our water system works finely, and we have reason to think that with ditches from the canyons, paved with stone and lined with cement, conducting the water to a main reservoir, from thence bringing it in concrete pipes to the highest corner of each lot, and along the border of the latter in a redwood flume to the head of each row of trees and vines, the perfection of irrigation is nearly reached.

At the new railroad station, distant 1 1/2 miles, all trains stop on being flagged, or on notice to conductor. A platform has been built, and a depot building will follow in due course of time.

The works of the Lugonia Fruit Packing Company are located near by, and a large amount of fruit will be handled the present season. There seems to be a general disposition in the neighborhood to do what can be done to aid this enterprise, even to the extent of selling fruit at lower rates than those offered by the Colton cannery. This is precisely as it should be. Encourage those who will spend their money in your own section. The idea prevails that cherries can be grown with us, and quite a number of trees have been ordered for next season's planting. The writer is inclined to think the experiment will prove successful. At Crofton, this season, a tree, the only one there, was loaded with this fruit, and for some years delicious cherries have been brought to market from the Yucalpa hills. This tree needs dry situation. Downing, in his valuable work entitled "Fruits and Fruit Trees of America," especially emphasizes this fact, and it likes a hilly country. Let us hope it may be added to our list of choice fruits.

A few thousand seedless Sultana vines have been planted here. Recently in looking through the vineyards in the adjacent settlements, the writer noted, in one instance, Muscats badly blighted, while the Sultanas, pruned on the long cane system, were loaded with large, well filled bunches. The two kinds were side by side, receiving the same treatment. Whether it will pay to plant the Sultanas largely, however, is yet an open question. Thus far they seem well adapted to the Southern country.

The few plum trees set out are not old enough to bear. Public opinion in Southern California seems to be against the cultivation of this fruit, perhaps, has not been thoroughly tested. In the immediate neighborhood, Green Gages are in full bearing, and some trees within the writer's knowledge have been good producers for many years. The tree should not be discarded because some of certain kinds fail to bear, as the German prune, for instance, until it has had a thorough trial. Probably peaches and nectarines do better in no part of the State than in the adjoining settlement of Lugonia, yet we can name varieties of both that never have, and probably never will yield enough to pay for planting.

## THE PLACE FOR A POOR MAN

The *Santa Ana Standard*, in discussing the question as to whether California is the place for a poor man, very sensibly and truthfully says:

Many people persist in saying that this is no country for a poor man; that land is too high and work is not to be had, etc. It is true that a poor man cannot come here, buy twenty acres of land, plant it out in fruit trees and wait until they bear without getting hungry; but the poor man who comes here expecting to work, as he has to in every country under the sun, can always find plenty to do, whether he be a mechanic or farm laborer, and at wages considerably in advance of those paid in the Eastern States. Our fruit farmers often find it very difficult to get laborers, and the prospects are that, owing to the increased demand, they will be more than usually scarce this fall.

## BUILDING IN STOCKTON.

The following is from the Board of Trade Report by its Secretary, N. M. Orr:

During the year 1892 one hundred and sixty dwellings were erected in the city limits, ranging in cost from \$400 to \$8,000. Most of these houses were erected by persons who intend to occupy them, and make Stockton their permanent residence, and the larger portion were such as cost from \$1,500 to \$3,000. During the year several large buildings for business purposes were erected, and the aggregate cost of all the new buildings and improvements completed during the past year exceeded \$500,000. Several large buildings are in progress or projected this year, and numerous dwellings have been or are to be constructed, and the prospect is good that the improvements in this direction will be as large for 1893 as for the previous year.



BROAD GAUGE.

## TIME TABLE.

Commencing Monday, Sept. 3, 1893.

And until further notice, Passenger Trains will leave from, and arrive at, San Francisco Passenger Depot (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DISTINCTION.	ARRIVE S. F.
8:30 A. M.	San Mateo, Redwood, and Menlo Park....	6:40 A. M. 8:10 A. M. 9:03 A. M. 10:02 A. M. 10:30 P. M. 11:45 P. M.
8:30 A. M.	San Jose and... Principal Way Stations...	9:03 A. M. 10:02 A. M. 10:30 P. M. 11:45 P. M.
10:40 A. M.	Gilroy, Pajaro, Castroville, Salinas and Monterey...	10:02 A. M. 10:30 P. M.
10:40 A. M.	Hollister and Tres Pinos...	10:02 A. M. 10:30 P. M.
10:40 A. M.	Watsonville, Camp Goodall, Aptos, New Brighton, Soquel (Camp Capitola) and Santa Cruz...	10:02 A. M. 10:30 P. M.
10:40 A. M.	Solida and Way Stations...	10:02 A. M. 10:30 P. M.
10:40 A. M.	Monterey and Santa Cruz... (Sunday Excursion)...	10:02 A. M. 10:30 P. M.

\*Sundays excepted. 1Sundays only. 1Theatre train, Saturdays only.

Stage connections are made with the 10:40 A. M. Train, except Pescadero Stage via San Mateo, and Pacific Coast Stage via Santa Clara, which connect with 9:30 A. M. Train.

SPECIAL ROUND-TRIP TICKETS. At Reduced Rates to Pescadero, Monterey, Aptos, Soquel and Santa Cruz; also, to Gilroy, Pajaro and Paso Robles Springs.

EXCURSION TICKETS.—Sold Saturday and Sunday—good to return on Monday to Santa Clara or San Jose, \$2.50; to Gilroy, \$4.00; to Monterey or Santa Cruz, \$5.00, and to principal points between San Francisco and San Jose, also to Gilroy Hot Springs, \$6.00.

SUNDAY EXCURSION TICKETS.—To either Monterey or Santa Cruz, and return, \$1.00.

TICKET OFFICES.—Passenger Depot, Townsend street and No. 614 Market street, under Grand Hotel.

A. C. BASSETT, H. R. JUDAH, Superintendent, Asst. Pass. & Tkt. Agt.

SOUTHERN DIVISIONS.

For points on Southern Divisions and the East, see C. P. R. R. TIME SCHEDULE.

## OCCIDENTAL AND ORIENTAL STEAMSHIP COMPANY FOR JAPAN and CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 12 M., YOKOHAMA & HONGKONG

Connecting at Yokohama with Steamers for Shanghai.

Will sail from San Francisco:

ARABIC.....Wednesday, November 28th.

OCEANIC.....Thursday, December 18th.

1894

ARABIC.....Thursday, February 7th.

OCEANIC.....Saturday, March 8th.

ARABIC.....Saturday, April 26th.

OCEANIC.....Tuesday, May 27th.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cable plans on exhibition and passage tickets for sale at C. P. R. Co.'s General Offices, Room 71, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 202 Market street, Union Block.

T. H. GOODMAN, Gen'l Passenger Agent

LELAND STANFORD, President.

## F. A. HATCH &amp; CO., (Members S. F. Produce Exchange.)

## COMMISSION MERCHANTS,

122 CLAY ST., SAN FRANCISCO.

Flour, Grain, Wool, Beans, Dried Fruit, Honey, Etc.

LIBERAL ADVANCES MADE ON CONSIGNMENTS.

—ADVERT FOR—

Healdsburg X X X Flour

—AND—

UNION MILL FLOUR,



## QUICK TIME AND CHEAP FARES

FROM

AUSTRALASIA, CHINA &amp; JAPAN,

TO

NEW YORK

AND

LIVERPOOL.

THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

CENTRAL PACIFIC RAILROAD

CONNECTING WITH

Union Pacific Railway

AT OGDEN, UTAH,

AND

SOUTHERN PACIFIC RAILROAD

CONNECTING WITH

Atchison, Topeka and Santa Fe Railroad,

AT DENING, NEW MEXICO,

AND THE

Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

## THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railway Lines in the Eastern States, for all the Cities of the

UNITED STATES AND CANADA.

CONNECTING AT

NEW YORK

With the several Steamer Lines to

England, France.

AND ALL EUROPEAN PORTS.

Silver Palace Sleeping Coaches.

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience to the Passenger while en route—combining the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable couches, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Patrons.

Children under Twelve years of age, Half Fare. Under Five years of age, Free.

100 pounds of Baggage per full Passenger free. 50 pounds of Baggage per half Passenger free.

## PRINCIPAL TICKET OFFICE

AT THE

OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

Where passengers, calling in person, can secure choice of routes and sleeping-car accommodations.

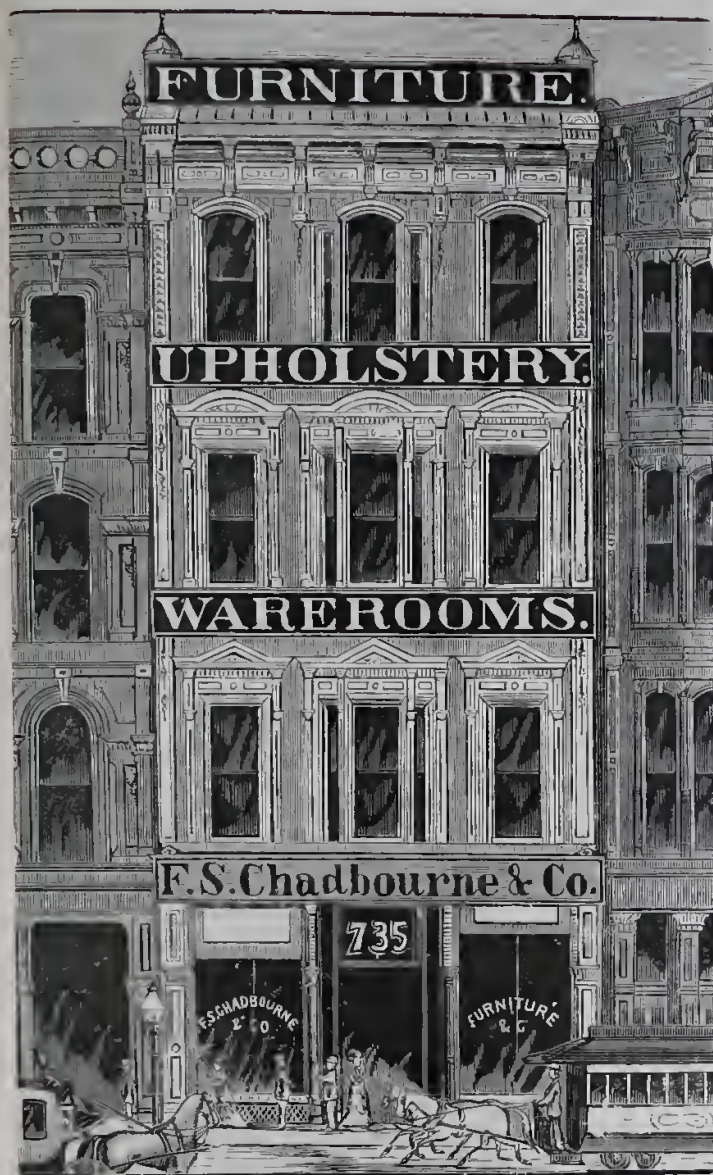
A. N. TOWNK, T. H. GOODMAN, Gen. Superintendents, Gen. Pass. & Tkt. Agt.

SAN FRANCISCO, CAL.



F. S. CHADBOURNE &amp; CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



IMPORTERS, MANUFACTURERS,

—AND—

Wholesale and Retail Dealers in  
**FURNITURE AND BEDDING**  
**OF EVERY DESCRIPTION.**

Chamber, Parlor, Library and Dining  
 Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish

Easy and Lounging Chairs, Etc.—Hotels and Private

Residences Furnished.—Designs Furnished

and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

TWO AGRICULTURAL SYSTEMS IN  
CONTRAST.

As late as 1870 the southern half of California, or that part south of Monterey bay, was in a very primitive condition. The only town of any note was Los Angeles, which was essentially a Mexican or native Californian town, many of the features of which are still preserved. There were other small towns along the coast, such as San Diego, Santa Barbara, San Luis Obispo and the old town of Monterey, the latter the most neglected and less flourishing of all. This journal in a series of articles, written a little later called attention to the excellent climate and comparative cheapness of lands in Southern California. The fact was pointed out that all this immense area was within the semi-tropical belt, where the orange, the fig, lemon and olive would come to the greatest perfection. Here and there were small orange orchards, and the Mission grape was grown in a few places. But these fruits made no figure in the products of the country. They were of importance because they furnished a satisfactory demonstration of the theory that nearly all semi-tropical fruits would flourish in the southern half of this State.

At that time this vast area was overrun with native cattle, wild, broad-horned scrubs, and muzzling horses. The primitive system of cattle raising had only a remote relation to agriculture. No hay or grain was produced for the subsistence of these cattle. If a dry season, followed by a cold, wet winter occurred, these cattle died by thousands. We have seen large herds of starving cattle offered at a dollar and a half a head, the being about the value of the hides, while the carcasses stripped off the hides were of no value. Horses were of less value, the hides not paying for removal. Here and there a large cattle owner, who occupied a Mexican grant with indefinite boundaries, was in a tolerably prosperous condition. He did little or nothing to improve the country. His cattle and horses were for the most part scrubs. He encouraged no neighborhood growth, and did not look with any favor upon the settler who undertook to create a homestead out of a few acres, and to live by a system of agriculture and horticulture in direct contrast with the system of industry adopted by the cattle lord. In fact, there was little which might be called industry about the latter system. So long as this system prevailed there was little growth in Southern California. The towns were few, and for the most part exhibited a primitive condition of squalor and neglect. The real industrial development and increase of population was north of the Bay of Monterey, as late as 1870, and for two or three years thereafter.

About that time this journal collected from various sources a large amount of accurate data bearing on the natural resources of this half of the State. These articles attracted attention a long distance from here. The weekly issue of the *Bulletin* is read in every State in the Union, and in all the great industrial centers of Europe. The tide of immigration began to set towards Southern California. The first immigrants did not find the conditions of the country much to their minds. They were forced to create a system in direct contrast with that which prevailed. It was a dry country, and in a year of drought, a very destitute one. Many of these early immigrants were discouraged and turned away from the country. Some of the local papers, catching the new spirit of progress, described the country in exaggerated terms, and these descriptions led to still further disappointment on the part of immigrants. But some of the more resolute ones, having once camped down were determined to remain and see what could be done. They made many mistakes. They encountered imperfect land titles, not unfrequently the hostility of the large cattle owners, who adhered tenaciously to a primitive system essentially coarse, barbarous and improvident. There was nothing in that system for the future prosperity of California. The new system, which was just having its inception, involved the gradual declination of the old one. It is not clean gone yet. But the wild, long-horned cattle which were once driven up to market from Southern California, and the muzzling horses are no longer seen on the roads. Nor does the dry, tough beef of the former any longer make a figure in this market. That system of cattle growing has been crowded back to New Mexico, and to a few of the watered valleys in Arizona. It is not wholly extinct yet in California; but it is so nearly gone that it is associated with the past as much as a crumbling adobe hamlet which has been half deserted.

Some of the results of the new system of industrial development are now seen in the flourishing settlements of Riverside, Ontario, Pasadena, Pomona, Orange, Anaheim and Santa Ana—in the orchards and vineyards, the beautiful homesteads, the fine and attractive communities which have grown up in that part of the State. In a large sense the new blood and muscle, brain and culture have redeemed Southern California from its stagnation, inertia and desolation. It is true it has not accomplished all this exclusively. The railroads have had an important influence. Yet if the old system of cattle ranching industry were now predominant, there would be little business for a railroad, and small encouragement to construct one. The fact of greatest significance is that within the last fifteen years a new element, or many new ones, went into Southern California. They took with them new traditions, another system of industry, and they have made a most remarkable demonstration of its success. There never were two systems of industry in more striking contrast than the old cattle ranching one now going out and the new fruit-growing one now fairly established. The older one could do nothing in the way of encouraging the growth of town or hamlet. It did nothing for schools, for the improvement of highways, nor for growth in any direction.

The new system stimulated growth in every direction. The neighborhood became a hamlet, and the latter a town of cottages, villas and country houses. The school and church are conspicuous objects and the central points of as refined rural societies as can be



country, such varied products and so few people, it is all the more necessary that we take ample time to prepare. Some of our Boards of Trade and Chambers of Commerce might well open the hall for this month—the season of fairs—and invite the formation of societies in every county of the State to arrange for each section being represented, and to select a State body to bring about the desired result—an ample, travelling and representative exhibit for California. It might be well, indeed, for the State Agricultural Board to take the initiative in this matter, and call upon like representative bodies in union with it in plans of organization for the event. It only needs that the ball be set in motion, for we are confident that the people of the State will, at a glance, realize the value of the New Orleans Exposition to California if we but improve the opportunities it offers.—*Sacramento Record-Union*.

### THE OIL TRADE.

The oil trade of California promises to attain gigantic proportions in the course of a few years. The development of new wells in Southern California is proceeding at a rapid rate, and so valuable is the oil territory that a particular location in one case has been guarded by force of arms. A pipe line of twenty-five miles in length is being constructed to carry the oil to port, and we may soon see seaboards loaded with oil arriving as regularly as those loaded with lumber. Some believe that we will some day eclipse Pennsylvania, but without going so far, we have good reason to expect that we will stand at least second in America as an oil-producing region, and by consequence second in the world. The production for 1882 nearly equaled five million barrels. The comparative production for a series of years has been as follows:

1879	Gallosa	508,800
1880		1,753,216
1881		4,194,102
1882		4,903,920

What the production will be this year we have no means of knowing, but we have no doubt that it will show a very large increase. When we can once get the oil out and refine it, we will have markets all along the Pacific, from Behring straits to Cape Horn and to Hobart in Tasmania.

In fact there is hardly a limit to the demands that we may be called to fill, for oil for illuminating purposes. But lighting purposes is not the only thing for which it can be made available. It has been used as fuel, and will come into much general use for steam-producing purposes. It has been principally found in Los Angeles, Santa Clara and Ventura counties. Seeps have been one of the leading features. It is expected, ere long, that a thousand barrels a day will be produced and this can be increased almost indefinitely.

The consumption of oil itself on this coast has been very large for many years, and has required a large supply from the East to keep it up. The distribution of oil for several years may be given as follows:

1882	Gallosa	3,043,560
1881		4,317,740
1880		2,000,400
1879		2,692,220
1878		3,344,631
1877		2,995,941

The distribution here does not mean consumption, it simply means what has been sold from San Francisco in a year. Besides this, about half a million gallons have been received yearly overland at Sacramento chiefly, while Southern California has been supplied in great part from the oil wells of that section. The actual consumption in California, Oregon and Washington may be averaged at four millions a year. It is rapidly increasing.

The business of the coast is in the hands of a few houses—one of which has sold as much as two millions and a quarter gallons in a year. This year the Standard Oil Company has imported very heavily, as also have several private firms, so that up to August last, about 165,000 cases of Eastern have come to hand, while the price has been put down to 14 cents for 160 degs test. How long this may last no one knows. The end of it will probably be to settle more securely the condition of the trade.—*S. F. Journal of Commerce*.

### IMPROVE THE OPPORTUNITY.

One of our local capitalists, who has the wherewith to make his projects good, authorizes us to state that he will take \$50,000 stock in a watermill to be erected and put in operation at this place. We can readily count up twenty others residing here who could easily afford to do likewise. They are all interested in the prosperity of the town and its growth, as well as the development of its resources. Though comparatively unformed upon the subject, we believe \$50,000 would be ample capital to start it with. The industry is one of the products of which are the necessities of life and always find a ready cash market. It is also one of the best paying industries peculiar to this coast, being rendered especially profitable by the natural resources. The Marysville mill has recently declared a dividend of thirty per cent upon its capital stock for the last year! Think of it! Two and one-half per cent per month! There is nothing of a visionary character in this proposition. It is practical in every sense of the word. And we would urge men of means to take hold of the matter at once, in earnest, and push it to a successful termination. Don't let this one man—who is not as well fixed as a dozen others living within five miles of this place—be the only one to display the public spirit characteristic of a live, prosperous community. He means business. His name can be learned at the *Herald* establishment. A watermill would give steady employment to from twenty to sixty persons the year round. That means an increase of that many families in our town. Their wages would aggregate from \$10,000 to \$20,000 per annum, four-fifths of which would be put in circulation here and added to the volume of business. Now is the time. Come to the front.—*Grizzly Herald*.

### CALAVERAS COUNTY.

In speaking of the resources of this county a correspondent of the *Echo*, published at Angels Camp, Calaveras county, says:

It has been the privilege of the undersigned to travel to more than half of the counties of the State. And he has noticed and compared critically the resources of the different localities, and does not hesitate to assert, without fear of contradiction, that but very few of the counties offer the same advantages that Calaveras does. California is receiving a larger number of permanent settlers than ever before. Men who are in search of homes, and who are eagerly looking for the best advantages, and it behooves the county to point out our privileges and encourage the newcomers to locate among us.

In no county of the State has improved farms been brought as cheap as here. The land is good and will produce all the grains, as well as every kind of fruit. In fact the fruits of Calaveras and Fresno are praised wherever they go. It is true that this year, the April frost dealt roughly with us, but it will do the orchards good to get a rest once in 30 years. No county in the State has better material, and in the near future, districts will have to be enlarged to supply the demand for the farms and orchards. While I concede all that is claimed for our mines, both place and quality, and am satisfied that better inducements can be offered to capitalists than in other places where the mines are the capital is better placed in and sunk for we have good pay for the laborer who has worked so much cheaper, than in other localities, on account of the accessibility as well as our advantages of cheap wood and abundant water power; yet the perseverance and ability of any county depends on its agricultural resources more than the best of mines. The richest mines of California and Nevada are worked out in 25 or 30 years, and only leave a hole in the ground, while the farm and orchard with proper management is not only more valuable, but more productive after the lapse of years.

Agriculture (in its general sense) and manufacturing need to be encouraged more and more, and it would be to the advantage of our business men, if they realized this and gave the former more sympathy and encouragement. A great deal of government land has been taken up in the last few years but there is a great deal left yet, the truth in regard to it should be published and actual settlers encouraged to come in and locate. The value of land will double in this county inside of the next five years, and by that time every quarter section, (except in the high Sierras) will be taken up. And many of our young men born and reared in this county who laugh at the idea of all our land being taken up will have to hury from the alien and stranger or "Go West" young man. Such has been the history of every county in the State where land now commands from one to five hundred dollars per acre. For years General Vallejo offered the pick of his immense grants from one to five dollars per acre. The same is true of all Southern California. El Dorado county similarly situated as ours, and the same as regards climate, soil, etc., has so developed its orchards that a friend of mine has paid as high as eighteen dollars to clear land to plant raisin grapes, an industry that offers great inducements to the people of our county, or to the stranger who elects to come and settle within our borders.

### PLACER MINES.

Placer mining in Southern California has always been successful, the first gold discovered in the State having been found in Placer canyon, Ventura county, by a Mexican, a few years before its discovery by Marshall at Coloma. We are now in receipt of late news in regard to more important placers. In the Salsedo and Placer canyons, above Newhall, the water is getting scarce, yet Mexicans, who are content with small returns, are panning the gold-bearing dirt in water, and making fair wages. In the Sierra Pelona the water is sufficient to wash the richest dirt, the average soil being reserved for the rainy season. The San Gabriel still is the scene of great activity in both placer mining and developing the quartz mines. The water is abundant, and, as is well known, not only ordinary placer mining, but hydraulic mining, is practical. Millions of dollars of precious metals have been taken from these deposits, as from the Plim, which is washed the entire year. This canyon comprises a portion of what is known as the Tennant ranch, and is a portion of the Olanthus property. The Palomas canyon, near by, is as rich as ever, but the claims are in the hands of a few men, who develop them simply according to their needs. The Tejon and San Francisco canyons, on either side of the Mojave desert, have been gold-bearing for many years, but on account of the difficulty of working them over the mountains, and the lack of a base of supplies, the output is small, although a number of men are washing in each canyon the year round. The Castagnol canyon, west of Elizabeth Lake and north of the mountains, is quite profitable at any time, but is scarcely tributary to this county, as most of the output goes toakers-shill, the most accessible town of importance. Besides these placers of importance, there are many which are only worked by one or two prospectors, and which have a slight yield individually, but which, in the aggregate, turn out a considerable amount of gold. Our placer mines are by no means a small factor in the output of precious metal from Southern California. In the winter season, when there is an abundance of water, the miners have lately learned to save the "float gold," a nearly insubstantial dust which floats in the surface of the water. The method adopted is quite simple, consisting of a series of water placed across the stream, so that the water shall flow over such a succession. These nets are constructed at places and timber, with coarse gunny cloth covering the upper side. In the rainy season, in a rich gold-bearing canyon, what is saved extra by these nets is estimated at from \$10 to \$15 per acre, according to the richness of the dirt above and the number of waters. In any case they are very profitable, as their cost is small. Every placer miner should use them, and increase his profits.—*Los Angeles Herald*.

### THE EXPORTING OF MANUFACTURED PRODUCTS.

We find the following excellent article in a late issue of the *Panama Times*:

No State can be truly and permanently prosperous that exports its raw material to other countries to be manufactured and returned, being compelled to pay a premium upon such imported commodities, in favor of shipment to and from the place of manufacture, cost of manufacture, duties, etc. Every locality which is capable of furnishing an abundance and a variety of products would not only in thousands of dollars in circulation among the citizens, but would receive thousands more by exporting its products in the manufactured instead of the raw state. Employment would be given to hundreds of operatives, most of whom would build up homes and add largely to the material growth and prosperity of the country. Until within a few years past little attention was paid to manufacturing industries in our State. A home market was to be had for most of the productions of the country, and there were other channels for investment and speculation which, it was supposed, offered better inducements to capital than the establishment and operation of manufactures. Capitalists, however, began to realize the fact that with the almost unlimited possibilities of the State in the way of producing material of various kinds suitable for manufacture, there was nowhere a more inviting field for the employment of their money than in the operation of manufactures. Hence, to-day, California is marching rapidly onward and upward to take her place among the great manufacturing states of the Union. Capitalists are gaining confidence in this as one of the paying industries of the Coast—one that is destined to exert a greater influence in building up the State and developing its resources than the entire products of all its mines, and possibly to at least equal its commerce. In importance, hence our manufacturers are yearly increasing, and we are glad to say, are generally reported prosperous. There is no county in the State that offers to the inducements to the man who has money to invest in enterprises of this kind than does our own. The resources of Los Angeles county are but in the dawn of development, yet there are many manufactures and they all seem to be in a healthy, paying condition. The capacities of the county are immense, and this fact is now fully realized by the moneyed men. Yet we ought not to have men manufacturing in operation. Take the case of sugar plant, and we venture the assertion that our county could not only supply all needed for home consumption, but could, in addition, export a large surplus, thus the amount of money which out of this article would be kept at home and much more would be received for that which was exported. In the production of corn this county excels that of all other counties of the State. Land which is adapted to the growth of corn will produce the sugar cane. In fact, the growth of the latter has been thoroughly tested in this county and has given more satisfactory results. Here is a field for the investment of capital that offers a rich harvest to him who first occupies it. Our own valley ought, before a great length of time shall have elapsed, to be the seat of one or more manufactures. In variety of productions no place can excel it, and yet the manufacturing of its possibilities has scarcely yet been touched. The establishment of these important factors of prosperity will cause the more rapid and complete development of our resources.

### APRICOTS.

The Santa Clara *Herald* of recent date said: San Jose apricots are evidently not doing bigging this year at least. Several now drying establishments have been started up within a few days, and they are all buying fruit, which keeps the price well up and makes owners of apricot orchards feel happy. The causing men have been saying for a year or more that the bottom had dropped out of the apricot business, and that henceforth they would be a drug on the market. Probably they would but for the driers. It takes a small fortune to start a cannery, but a few hundred dollars will start one in the drying business. And the more one looks at this question of handling fruit the more it seems that drying will be the way in which the great bulk of our fruit must be prepared for market. The price of orchards in which most of the trees are apricots is advancing. One gentleman from \$4.50 has advanced the price to \$6.00 within the last week, and with apricots selling at wholesale in San Francisco at from two and one-half cents to three and a half cents per pound it would seem that an apricot orchard was a good thing to have, especially if it is located in a section free from frost. Young trees have not made a very good growth this season, and many have died where extra care was not given them.

### DAIRY AND OTHER MATTERS.

Cheese-making is rather a new enterprise in Sierra valley. A few of our dairy men have given a little attention to it for some years, making a small amount, using most of them, and putting a fairly sale for the surplus, with other white-awake dairymen have been firm in the conviction that good cheese could not be made here. The firm of Dotin & Augustine have been for some years making Swiss cheese at their ranch in East Grange, and have started considerable enterprise in shipping the same to London, Boston and San Francisco. Charles Frost, residing the ranch from which they belong to F. Whittell, makes a fine article in Swiss cheese, while most of the Swiss dairymen give some attention to this branch of industry every season. William Evans has entered more into cheese-making than any of our American dairymen. Borrowing instruction from a cheese-maker from a Wisconsin factory, he has been for the past three seasons making some cheese. He turned out this season, during the last month of the cheese-making. The demand is so great that his trouble is to keep his cheese well properly cured. Our firm offers to take all he can make, besides having an increasing home market.—*San Sierra Valley Leader*.



# THE RESOURCES OF CALIFORNIA

J. P. H. WENTWORTH,  
Editor and Proprietor.

SAN FRANCISCO, DECEMBER, 1883.

ESTABLISHED, 1870.  
Office—320 Sanson St., Halleck Building.

Entered at the P. O. San Francisco.

**\$2 PER ANNUM.**

Six Months, \$1.25—Postage Paid.

SINGLE COPIES, 20 CENTS.

ISSUED MONTHLY.

veloped, although it was this portion of the State which the old Franciscan padres found so well united to their needs and purposes. Here all kinds of semi-tropical and deciduous plants flourish in full luxuriance, and cattle and sheep thrive and multiply, yielding a large profit to those engaged in this industry. But the days of the supremacy of the missions have long since passed away, the poor monks have been driven from their homes, and their possessions confiscated to private uses. The

happy, "taking no thought for the morrow," These padres taught hospitality as a part of their religion, and some of that philosophy still remains, for it is a well known fact that the inhabitants are noted for their attention and kindness to strangers.

Los Angeles county is especially fertile, except on the sandy waste in the northern part. There is a range of mountains traversing the centre of the county, and this region is well adapted to grazing and bee culture, an exceedingly pleasant out-door

branches, irrigating the El Monte region. Los Angeles river, rising in the lively San Fernando valley, furnishes water for domestic and irrigating purposes to the city of Los Angeles and neighboring places. The portion of land, however, lying southwest of the mountains contains the richest lands, as orange groves here in almost unbroken succession, from Orange, Anaheim, Santa Ana and Westminster to Los Angeles. The soil is a brown sandy loam, rich in vegetable matter, somewhat



RESIDENCE OF MRS. MARK HOPKINS, SAN FRANCISCO.

## LOS ANGELES COUNTY.

Its Climate—Productions—Exports—People—Schools, Etc.

Its Principal Cities and Towns, and their Industries, Described.

[By the Travelling Agent of THE RESOURCES.]

In points of beauty, fertility, salubrity of climate and healthfulness, Los Angeles county stands pre-eminent in that section known as Southern California; a region whose resources are yet to be de-

veloped, although it was this portion of the State which the old Franciscan padres found so well united to their needs and purposes. Here all kinds of semi-tropical and deciduous plants flourish in full luxuriance, and cattle and sheep thrive and multiply, yielding a large profit to those engaged in this industry. But the days of the supremacy of the missions have long since passed away, the poor monks have been driven from their homes, and their possessions confiscated to private uses. The

happy, "taking no thought for the morrow," These padres taught hospitality as a part of their religion, and some of that philosophy still remains, for it is a well known fact that the inhabitants are noted for their attention and kindness to strangers.

Los Angeles county is especially fertile, except on the sandy waste in the northern part. There is a range of mountains traversing the centre of the county, and this region is well adapted to grazing and bee culture, an exceedingly pleasant out-door

branches, irrigating the El Monte region. Los Angeles river, rising in the lively San Fernando valley, furnishes water for domestic and irrigating purposes to the city of Los Angeles and neighboring places. The portion of land, however, lying southwest of the mountains contains the richest lands, as orange groves here in almost unbroken succession, from Orange, Anaheim, Santa Ana and Westminster to Los Angeles. The soil is a brown sandy loam, rich in vegetable matter, somewhat

clayey in the hollows, and gravelly on the ridges. Alkali is occasionally met with in some localities; sugar beet raising being best adapted to that kind of soil. This would add another to the many industries of this county. The climate is cool, the sea breeze doing much to render the temperature delightful. It is said that, in 1882, the crop of oranges was 5,000,000 and nearly as many lemons and limes. Cereals are more dependent on the character of the season. The following will give the reader a more accurate idea of the variety and productiveness of this fertile county. Amount of wine produced in one season, 3,000,000 gallons; brandy, 500,000 gallons; wool grown, 3,402,538 lbs.



honey produced, 575,000 lbs; acres sown to wheat, 60,000; number of acres to orchards, 5,000; vineyards, 2,342—herd a many other products not enumerated, but which are worthy of mention.

The price of land is steadily improving, even the poorest land bringing from \$12 to \$18 per acre, and orchards in full bearing bringing from \$1,000 to \$1,500 per acre.

#### Orange Culture

The oranges of Los Angeles county are delicious and bring good prices. The lemons and limes are equal to those raised in the old country. The cultivation of this fruit is not difficult, the most needed factors being patience and perseverance. The fruit trees must be irrigated, and the immense value of water, in a land where no rain falls during six months in the year, cannot be appreciated by one who has not lived in such a country. Several systems of irrigation are practiced; one by flooding the land; a wasteful plan that can be used only in flat districts. Furrows are more popular, and by this process a large head of water is brought upon the land and distributed in small streams in many narrow furrows. The streams are made as small as will run across ground and are allowed to run only twenty-four hours at a time.

There is a plan in practice in mountain irrigation, of digging basins around the roots of trees and filling them with water brought in pipes or ditches, and often by flumes. Sub-irrigation is thought to economize water, as it is carried in pipes from two to three feet underground. By opening valves in these pipes the water is let out, and up, but never comes above the surface. The main ditches or canals are sometimes quite picturesque, running as they often do in treacherous of overhanging trees and climbing plants and vines, occasionally being spanned by artistic bridges, half hidden by the luxuriant foliage. These streams are frequently met with most unexpectedly, and are quite pleasant surprises. The groves of oranges, lemons etc., are very regularly laid out and are somewhat monotonous, as the trees are trimmed so as to appear short and thick—not a pleasing characteristic either in trees or persons. The orchards must be irrigated about once in six weeks, and will cultivated after each flooding. No weeds are to be seen in well kept orchards and everything tends to a tidy appearance of the groves as the leaves fall to the ground.

The leading position which the fruit interest will ultimately take, has been reached in Los Angeles county. The fruit harvest is nearly uninterrupted all the year round. The main orange crop ripens from January to May, although oranges hang on the trees all the year. The lemon, lime, and citron ripen and hang like the orange. Apricots, pears, peaches, nectarines, strawberries, currants, and figs are plentiful in June; apples, pears and peaches, during July and August. Late in July, grapes begin to ripen and come into market, and last till January. September is the best month of all, having grapes, peaches, pomegranates, walnuts, almonds, and a second crop of figs. From the latter part of August till Christmas, the vintage does not cease. The worst enemy of the orange is a most curious insect called the scale bug. It looks more like mildew than anything alive. It is usually black, sometimes red; nothing but prompt treatment with tobacco will eradicate it. Most of the fruit is well looked over, and boxes are disinfected, as by these means the scourge is kept down.

#### Grapes.

Notwithstanding the increase of grape culture, the price of grapes is advancing; some estimates making it forty per cent higher than it was five years ago. It is a quicker and probably a more profitable industry than orange growing. It is estimated that a vineyard in its fourth year will produce two tons to the acre. In seven years four tons. In the tenth year it is very profitable, reckoning the cost of vineyard at \$60 per acre, exclusive of first cost of land. The annual expense of cultivation, picking and hauling is about \$35 per acre. The rapid increase of this culture has been marvelous. In 1848, there were only 200,000 vines in all California. In 1862, 9,500,000; in 1881, 64,000,000, of which 34,000,000, at least, are in full bearing. Such facts and figures are distressing to advocates of total abstinence, but they may take heart from the fact that a by no means insignificant proportion of these grapes will be made into raisins, canned or eaten fresh.

Many grape growers believe that in raisin making will be found the greatest profit. The Americans are a raisin eating people. From Malaga alone are imported into the United States about ten tons of raisins per annum, one half the entire crop of the Malaga raisin district. This region has an area of only four hundred square miles. In California, an area of at least twenty thousand square miles is adapted to raisins, which are cured by placing the gathered bunches on the sandy soil, and allowing the sun to shine upon them with its hottest heat and turning them often enough to prevent mould from accumulating. Many dryers are used, but this plan of sun drying has been found to be the most satisfactory, and produces the best raisins.

The annual yield of wine in California is already estimated at 10,000,000 gallons, nearly one-third of this is made in Los Angeles county, where the grape culture is on the increase, two millions of

new vines being set out in 1882. The vineyards are interesting during the picking season, being thronged with Mexican and Indian pickers. The Indians are good workers, and come in bands and pitch their tents just outside the vineyard. The wine cellars and great crushing vats tell the vineyard's story even more emphatically than the statistical figures. One vat will hold over one thousand gallons; piled full of grapes, huge vine whips drive round and round in the spouting mass, the juice flying off into troughs on each side, leading into many great vats prepared to receive it. Below, men toil hard, working the wheels; loads of grapes, coming up every moment, are emptied into the swirling vat, and the whole atmosphere is redolent with the odor of richly scented grapes.

The cellars, where the juice of the grape is stored, are quiet, dark and fragrant, full of gravel, oval-shaped huts, ten feet in diameter, each containing over two thousand gallons. These stand as palpable evidences of the great value and importance of this industry in Los Angeles.

The soil of Los Angeles valley is exceedingly fertile, and there are many smaller valleys, which are also fertile. The

#### City of Los Angeles

is located in this valley. It is the largest city of southern California, and is beautiful as well as healthy. It is quite metropolitan in appearance, having consecutive blocks of fine business houses and residences. The streets are well paved, kept in good order and lighted by gas and electricity. Many modern and beautiful cottages and desirable buildings have taken the place of the old adobe. There are bluffs in the city, from which most extensive and beautiful views of miles of flourishing orange groves and grain fields are to be seen, as well as numberless comfortable, elegant and costly buildings and homes. The city property is quite valuable, and has grown especially so during the past three years, since the Southern Pacific Railroad gave direct communication with San Francisco, as well as with the South and East. The population has increased to three times the number it contained in 1874.

#### Schools.

The educational advantages are superior, and the schools are well superintended. Not many years since, or after the burning of the State Normal school at San Jose, the Los Angeles people offered all that was consistent to have the school located there; but San Jose wanted it, and right of precedence also favored the latter city; but the State Legislature appropriated an amount sufficient to build and maintain a branch in Los Angeles, which is an honor to the city, as also are the other educational institutions—Branch University, high and graded schools, Sisters of Clarity's day and boarding school for young ladies and St. Vincent's college. All these are spoken highly of by the people, who are right in taking so much public-spirited interest in the advantages the future citizen are now enjoying.

#### Newspapers.

The press of Los Angeles is ably supported, and all that can be, is being done by it to further the interests of this locality. The dailies compare favorably with those of larger cities. There are many newspapers published in Los Angeles, among which are the Los Angeles Mirror, Herald, Times and Rural California, the first three being dailies, the latter a weekly.

#### Water Works.

Water is furnished the city by the Los Angeles water works, incorporated in 1863, costing \$400,000. Prior to 1863, these works were owned by the city, and the new company has added to the facilities and replenished the supply in a satisfactory manner.

The Beaudry water works is a private enterprise, established six years ago. The water is obtained from a magnificent spring, located on the Alameda, covering an acre of ground. This water is said to be very pure.

Churches are well represented, there being ten religious denominations in flourishing condition. Many of the buildings are of elegant appearance and good construction. The Infirmary is under excellent supervision, and its inmates are comfortable and cheerful. The City library is well patronized, and is a means of furnishing much useful information to the intelligent readers of this city.

Street car lines run throughout the city, one leading direct from the Southern Pacific Railroad depot, through the principal streets, past the Pico house and other hotels and business houses. Other lines lead through the residence portion, and are a speedy and convenient means of communication.

The City gardens and nurseries form attractive and instructive places of interest to residents and strangers visiting the city.

Los Angeles is reached by the Southern Pacific Railroad, and by Goodall, Perkins & Co.'s steamers, stopping at San Pedro, the harbor for Los Angeles, where a railroad connects it with the city. The steamers are well officered and the accommodations are good, making this route quite popular. Stages also connect with various places, and telegraph and telephone communications extend to all the principal offices.

#### Banks.

The oldest is the Los Angeles county Bank, established in 1871. John E. Piater is President and H. L. MacNell, cashier.

The First National Bank commands a large capital. Its President is E. F. Spence; cashier, Wm. Lacy.

The Farmers and Merchants' Bank is a thoroughly reliable institution, conducting its business on an especially sound financial basis.

#### Manufactories.

Carriage making is a prominent feature in this city, there being many factories. Wm. Pingree, formerly of Chicago, is an able business man, and a dealer in the celebrated Abbott vehicles. These are made in Chicago, and are of superior quality in material and workmanship. The firm are also the manufacturers of the celebrated Concord coaches.

L. Lichtenberger is a manufacturer and importer of fire carriages and spring wagons, and is agent for the Putnam trucking cart, and for wagons, etc., from New York, New Haven, Columbus and Baines. Mr. Lichtenberger has been established nineteen years, and has proved himself to be a successful man. His shop and repository are two stories high, 150x10 feet, and he has also a storehouse 50x75 feet in size.

S. W. Lintwiler, located on Los Angeles and Pequena streets, has a two-story building, 50x152, used exclusively for wagons, carriages and buggies. It is the largest house in this line in southern California, and all stock made to order for this climate are warranted not to shrink. Mr. Lintwiler is agent for the well Studebaker firm and freight wagons, spring wagons, buggies and phaetons.

Jesmon & Hutzgraff, connected with the Farmers' blacksmith shop, and Schmidt & Hafman, are manufacturers of carriages, the latter making a specialty of the desert wagon.

#### Office Business Houses.

Doller & Bradley, dealers in furniture, carpets and wall paper, on Main street, is one of the largest houses in southern California. The store is spacious and carries a \$60,000 stock, and the firm do a \$250,000 business annually.

Sharp & Blaser are practical upholsterers and mattress makers, and dealers in carpets and furniture. This firm makes a specialty of fancy decorating and wall papering.

M. W. Childs is a dealer in stoves, ranges, pumps, shelf hardware, agricultural implements, crockery and glassware. Mr. Childs is a manufacturer of tin, copper and sheet iron ware and artesian pipe, so extensively used in this country.

Brown & Mathews are dealers in builders' hardware and agricultural implements, on Spring street.

Schultz, Johnator & Co. are doing a large wholesale importing business, at 36 and 38 Los Angeles street. They deal in hardware, coal, iron, steel, Concord and Kingsley axles, carriage springs, horse-shoe nails, etc. This house is reliable and thoroughly devoted to business.

Lieckert & Co. do a thriving business in hay, grain and mill feed. This is a popular store as goods are delivered free of charge to purchasers.

Geo. A. Vignolo is the proprietor of La Esperanza store, and is a wholesale and retail dealer in groceries, provisions, wines, liquors and cigars. Mr. Vignolo is also a commission merchant.

The City foundry and machine shops are located on Main street, and supply home orders.

J. P. Holbrook manufactures well tubing and water pipes, and J. D. Burrows is engaged in the same business.

The cream tins works, E. Reinert's cooper shop, Holbrook & Ward's beautifully polished wood and furniture store, the soda works, Perry & Pollard, pipe and plumbing material, two marble works and the lumber yard of Kerchoff, Cuzner & Co., are among the numerous business houses, many of which are not mentioned.

There are several breweries, the Philadelphia and New York being the principal. The wineries are owned by Valla & Tomoni, M. Keller, and J. Burard, all of whom ship many thousand gallons yearly.

One of the most important new industries is the Southern Pacific Packing Company, which proves of great benefit to the community, as the surplus fruit is now utilized, and many hands are given employment.

John B. Niles is with William Niles, raiser of live stock, and also with Ponery & Mills, real estate and loan agents. Mr. Niles is an agreeable gentleman and attends strictly to business.

Paypo, Stanton & Co., superior artists and photographers, are located in Temple block, at the junction of Spring and Main street. Their work is of first-class, and is done for the first people of the city. Their views of southern California are well called for by beauty of finish and workmanship, and meet with a ready sale among people who like souvenirs of the beautiful scenery to be found there.

George T. Haily & Co. have a large and well selected stock of tea, coffee, spices and yeast powders. They manufacture their own spices, and do all in their power to give a good, pure article for the least money, and believe in patronizing home industry. This firm is composed of excellent business men, and pleasant to deal with. They are located near the new railroad depot, and are doing a large wholesale and retail business.

#### Hotels.

The principal ones are the Cosmopolitan, and the

Pico; the Cosmopolitan, situated in the center of the city, has fine, airy rooms, and the wants of travelers are carefully attended to. From the Pico, a magnificent view of the Sierra Madre mountains may be obtained. This house is opposite the delightful plaza and is well appointed. The St. Charles, on Main street, has all the modern improvements for a first-class house. Hutchings' boarding and lodging house, and the Kimura and Pacific Houses are among the second-class establishments.

#### The Business College.

This institution is located in the Post Office building; Mr. C. W. La Feta being the efficient principal. This is a new business college, but bids fair to become a large and prominent one. There are sessions day and evening and full business course, photography, assaying and Spanish are taught by competent instructors in all their branches. Ladies are admitted, and trained as thoroughly as other students.

#### Poultry.

The raising of poultry commands much attention in this county, and great care has been given it by a practical poultry raiser, Mr. William Niles, who has published an exhaustive treatise on the subject, that is well worth careful perusal by the many interested in this sometimes puzzling occupation. This book treats on the care, exercise, food, profit, homes, nests and water for fowls of all kinds; illustrations of the finest breeds being given. It contains, also, illustrations and items relative to thoroughbred four-footed stock, written by one who is experienced in the business. Mr. Niles is an importer and breeder, and ships annually many boxes of eggs, chickens, etc.

#### Santa Ana Valley.

This valley is one of the most productive regions in this country, and is about twenty miles long and sixteen broad, from the foot-hills to the ocean. At least four-fifths of its area is arable land. Within these limits, the orange, lemon and lime grow side by side with the apple, peach and pear, while the delicious apricot of Asia flourishes and matures to perfection with the figs of Turkey and Smyrna, the almond of Italy, and the olive and English walnut. The variety and productiveness of the soil offers a field for every phase of agriculture and horticulture. From eighty to one hundred and thirty bushels of corn are raised to the acre, and, at the same time, between the rows of corn are raised large crops of onions, potatoes and pumpkins. Many farmers, after harvesting a crop of barley (yielding from sixty to one hundred bushels to the acre), plow the land and plant it to corn or potatoes, thus securing two crops a year. The geographical position of the valley is most favorable; no intervening mountains arise between it and the coast, and thus, for the greater part of the year, its inhabitants enjoy the gentle sea breeze, making the days more pleasant, and the nights more comfortable for sleeping. The average temperature for the past seven years, has been sixty-five degrees; the highest average in any month being seventy-five and one-half degrees, in August; and the lowest, fifty-six degrees in December.

The shipments from Santa Ana alone, by railroad and steamer, for the year 1882, aggregate the enormous amount of 32,000,000 pounds; some of the principal items being 6,207,000 lbs. corn, 800,000 lbs. barley, 1,000,000 lbs. wool, 3,207,870 lbs. coal, 200,000 lbs. potatoes, 28,240 lbs. eggs, 80,000 lbs. beans, 40,204 lbs. lard, 150,000 lbs. honey, 183,860 galls. wine, 27,780 lbs. dried fruit. The shipments also embraced 331 car-loads of logs, 57 car-loads of sheep, 64 car-loads of green fruit, 21,212 boxes of raisins, 18,097 boxes oranges, 12,780 boxes lemons and 560 boxes lemons.

Only ten years settled, with about one-third of the land cultivated, one may well wonder at the progress made, and the prospects for the future.

The principal town in the valley, and second largest in the county, is

#### Santa Ana.

About thirty miles southeast from Los Angeles county. It is the terminus of the Santa Ana and Los Angeles division of the Southern Pacific Railroad. Its location and surroundings are in the highest degree picturesque, being situated on a slight eminence, while on every side stretches away the fertile valley, on the east to the Santa Ana mountains, on the north to the vineyards of Anaheim, and on the south and west to the Pacific Ocean. Its orange groves and orchards, its vineyards and handsome cottages and numerous homes add additional charm to its beautiful surroundings. Santa Ana has a population of about 2,500, which is steadily increasing.

The Santa Ana hotel is of the first class; the proprietor is J. W. Layman, who has an old way of advertising, viz. "I will treat my guests as meanly as I know how, and charge all I can get." It is probable that he does the contrary, judging from the patronage the house receives.

The Commercial is a reliable bank established in 1882, with D. Halliday as President and W. S. Bartlett, Cashier. Capital \$100,000.

Many fine stores adorn this little "burg," among which are Snyder's general merchandise store, and that of J. C. Phillips, dealer in staple and fancy dry goods, boots, shoes, etc. Mr. Phillips is a genial man, and carries a fine stock of goods.



B. N. Rowe, proprietor of the Santa Ana book store, has a large stock of school supplies, books, brackets, pictures and frames, vestments, silks, cigars and tobacco, and is agent for San Francisco and Eastern papers and magazines.

H. T. Hollingsworth, watchmaker and jeweler is located in a store equal to any in Los Angeles. It is in a fine building, and is well stocked with all kinds of silver and gold ware and jewelry of the finest quality. Mr. Hollingsworth is an expert worker in jewelry, and makes repairing a specialty.

Nestor A. Young, successor to Young & Woodward, is an enterprising and energetic real estate agent, who is doing his best to forward the land interests of this vicinity, as he deals in stock ranches, dairies, orange and lemon orchards, vineyards, live ranches, and any sort of land for any purpose suited to this prolific section.

The press is well represented and ably managed, and is actively engaged in furthering emigration, and distributing practical knowledge.

#### Santa Monica.

This town is sixteen miles by rail from Los Angeles. It is here where good surf bathing may be enjoyed all the year, and every accommodation has been furnished by Mr. Scott, at a cost of \$10,000. Large bath houses, with hot and cold salt and fresh water baths are on the beach, directly in front of the Santa Monica hotel. Everyone who can find it convenient, should visit this famous summer and winter resort. The hotel is a gem of its kind, having accommodations for sixty or seventy-five guests. It is under the proprietorship of Mr. Scott, and the buildings, located on the bluff overlooking the ocean, have a first-class bar and billiard table attached.

Santa Monica is a flourishing little village, containing a population of about six hundred souls. There are three hotels, three stores, a livery stable, two churches and a fine graded school, situated on Santa Monica bay, in the midst of an excellent farming country.

Messrs. W. D. and E. J. Yawter are the pioneer dealers in Santa Monica in general merchandise.

M. E. Chapin is engaged in the sale of groceries, provisions, newspapers, books, stationery, etc., and is quite successful.

H. Giroux & Brother, dealers in groceries and liquors, have been established since 1875, when Santa Monica was first laid off by the Santa Monica Land Company. They have a large stock and are doing well.

Mr. M. R. Gaddy has several single and double carriages, as well as a number of saddle horses, for ladies and gentlemen. The drive over the magnificent sand beach, for twenty miles, is delightful and a natural bridge is also to be seen during the trip.

#### Anaheim and Orange.

Are both centers for the successful growing of orange, lemon and other fruits and vegetables. At Orange, F. E. L. Marsh, of the Anderson house, is an enterprising insurance agent and real estate dealer.

The Anderson house is under the supervision of Mrs. Marsh, and tourists and others will not find a better place for a sojourn among the orange groves.

#### Ostrich Farming.

The following notice of a novel industry we copy from the columns of a cotemporary:

"Not far from the town of Anaheim is a ranch to which many visitors are attracted, both for the purpose of satisfying their curiosity and seeing the only ostrich farm in California. This consists of six hundred and forty acres of alkali soil. A well, which has been sunk to a depth of three hundred feet furnishes many thousand gallons of water per day. With the aid of this well, the proprietor, Dr. Sketcheley, is enabled to wash the soil and draw the alkali out and off the land. The ostrich farm planting began only in last April. The ostriches are dangerous birds and are fenced in a corral of heavy boards to keep them from kicking through. The incubating house contains two large incubators with one hundred and two ostrich eggs, which are being hatched artificially. The birds on the farm were transported about 22,000 miles, partly by car, before reaching the farm. None were lost en route and nine have died since being placed on the farm. The climate of southern California is favorable to them. The summer weather is warm enough and the winter is not so cold as in Africa, their native home. When the temperature was one hundred and ten degrees in the shade, the drawers contain-

ing the eggs were taken from the incubator and the eggs laid out on the ground in the shade of the house, and it was then warm enough for incubation. The success of the experiment is assured. If the eggs should not hatch, the value of the feathers will cover the expense of sending the birds for one year. Since April 12th the birds have deposited two hundred and seventy eggs, one bird laying as high as forty-seven; they lay every other day. The difficulty of farming ostriches properly is in raising the chickens. The young bird's contract could upon the slightest occasion. A chicken six months old bears feathers valued at about ten dollars. When fourteen months old the value is between \$20 and \$30, and a bird between three and four years old is valued at about \$250 annually. The ostriches eat mainly alfalfa and barley. They are also fond of turnips, cabbage and potatoes."

#### Newhall.

This village is on the line of the Southern Pacific Railroad and located near the San Fernando tunnel, the longest on the line. It is not much more than a hamlet, the Southern hotel being the center of attraction. This building and ground is owned by the railroad company, who keep everything in the best of order. B. R. Boynton is the proprietor. From here the Continental Oil Company ship their oil all over the State, and people from Los Angeles stop over night at the Southern in order to take Alhambra's stage for Santa Barbara, reaching there the same night.

The Derrick saloon is kept by T. V. Johnson, who is the grandson of Dr. Johnson of England. Mr. Johnson came to Newhall in 1883, and is well established. He was formerly proprietor of the

ance. Some are finished in natural woods, and some are cased with wood of the most expensive character. The interior walls are covered with marine curiosities, gathered by sailors in all portions of the world. The collection of handwork, made by sailors in ships and quaint carvings are splendid. The most remarkable curiosity of all is a large star formed out of legal documents from the courts and sheriff's office, and are hawking brought against Capt. Jones by the Southern Pacific Railroad and General Phineas Banning to eject him from this spot, but unsuccessful thus far. The old gentleman intends to manage a newspaper called the *Shipping Gazette*, and is determined to grow rich with San Pedro. For these items, on the old ship-house, we are indebted to the Santa Barbara Independent.

#### GROWING WALNUTS.

The following brief description of the largest walnut orchard in California, we take from the Santa Barbara Press:

The Carpentaria appears to be perfectly adapted to the production of English walnuts. This nut is sometimes called the Malabar nut, large quantities of them being annually imported from the Madras Islands into the United States. It is a native of Persia. The Mission fathers planted these trees in all the Missions which they founded in California, and, at some of the old Missions, many of the trees originally set out by them, still flourish and produce enormous crops every year. As the tree comes to maturity and begins to bear here in the same number of years as in Persia, and grows equally as well here as there, it is evident that the

from the trees before being fully matured, is said: "I am surprised that such a rumor could exist. I have watched my orchard with the utmost vigilance and can not detect the slightest effect from the hot weather except that it matured the crop a little sooner. As to the yield, I expect to harvest in the neighborhood of 850 or 950 sacks at two and a quarter bushels per sack or about 1,900 bushels.

"As to how many bushels per acre my orchard produces, that I can not answer with any degree of accuracy, as part of the trees are young and a correct estimate of their production per acre can not be made. I do not think a walnut tree can be pronounced to be in full bearing age till it is a hundred years old. The great financial consideration in walnut trees is their steadily increasing yield, year after year. As to what a tree can produce when at full-bearing age, I have heard of trees in France that were said to be 75 or 100 years old, that yielded fifteen bushels annually. The oldest tree I have seen 23 years old, and the largest crop produced by any one tree was five bushels.

"As to walnuts being of better quality here than elsewhere, I do not think they are, notwithstanding our walnuts at present bring a higher price by two or three cents than the Los Angeles or Utah nuts. The secret is perhaps wholly in the drying.

"We use our nuts in a dry-house instead of in the sun; by the latter method they alternately dry and gather moisture which generally results in rotting about 20 per cent. of them, while in the dry-house method not more than one in a hundred are bad. At the time of harvesting them, the nuts are allowed to lie on the ground about ten days, they are then conveyed to the dryer.

"At eight years of age a tree begins to bear, but does not become paying until twelve years old. The ground can be planted in the years of waiting with small cereal crops and so utilized, and paying for itself many times over before the twelfth or thirteenth year, when the spreading shade of the trees becomes too dense and small crops can well be dispensed with.

"Walnuts can be successfully raised anywhere in Southern California where the soil is a sandy loam reaching deep enough. The trouble is that in many places there is a hard-pan at a depth of about three or four feet which the tender roots will not penetrate, the roots must go deep or the tree can not be a success."

The price per pound this year is eleven cents. Walnuts are seldom or never a drug in the market. Col. Heath will this fall plant out a thousand more trees and intends extending the orchard until all of his land is occupied.

#### A MAGNIFICENT LUMBER REGION.

Few people have any good idea of the vast timber resources of Tuolumne

country. Lying on the southern boundary, along the Mariposa line, on the upper waters of the south and middle forks of the Tuolumne river, is the finest body of lumber timber in the world. Here, for sixty miles, is an unbroken forest of sugar pine, yellow pine, red and white fir and spruce. The trees are enormous in size and rise to magnificent heights, while the growth is so dense as to plunge the depths of the forest into a perpetual gloom. The trees average from five to ten feet in diameter, and their freedom from limbs and knots greatly enhances their value for lumbering purposes. It is nothing extraordinary to see sugar pine and red fir trees ten and twelve feet in diameter, straight as an arrow, and rising to a height of 150 or 200 feet. This body of timber is easy of access, and only requires to be tapped by a railroad to be turned into a vast source of wealth. As yet most of it is the property of the Government. Much of it, however, has been surveyed, and is now in the market. About two years since, some parties projected a railroad through this region, and prepared to grab about 50,000 acres of the timber, but apparently the scheme has fallen through. Their scheme was not a legitimate enterprise, as their object was only to get the property under way, and then make a big deal with Eastern capitalists. Now the giant trees stand nodding invitation to the railroad and saw mill. Whenever these two agencies make their advent into this immense forest, old Tuolumne will spring into renewed life and prosperity. The field lies fallow now, waiting for the coming of enterprise and capital. — *San Francisco Democrat*

Subscribe for THE RESOURCES OF CALIFORNIA.



GROUNDS OF THE HOTEL DEL MONTE, MONTEREY, CAL.

Ocean View house, now Douglas house, of Santa Cruz.

#### Whittier.

This is a town on San Pedro bay, formerly the shipping port for Los Angeles and Arizona. It is a thriving little place. The Railroad hotel is managed by S. G. Thompson. Rafael Poggi keeps a restaurant and liquor store. Wilson college, under the auspices of the South Methodist Conference, seems to be doing a good work. The buildings and lands were formerly used as barracks and hospitals for Government soldiers.

#### A Queer Substitution.

Below Santa Barbara, among the sand-hills of the Palos Verdes rancho, upon the shores of San Pedro bay, is a quaint and most interesting little home, perched in a dry arroyo, consisting of a square house, with a plaza extending all around it, and a flag-staff surmounting the whole. It has the appearance of a cozy little hotel, and over the top can be seen painted upon the stern of some wrecked ship, the words "Ocean Villa." Oddly enough, the house and its whole surroundings are made up of portions of wrecks gathered by the owner, Captain Jones, as a waterman upon the south coast during ten years. The garden fence, the plants and ornaments bear signs of the sea. The house is a combination of bulwarks, locks and cabins. The principal room is the cabin of some first-class ship; the room above it is the cabin of a bark; the kitchen is the galley of a wrecked merchantman, and each and all of the many appointments are either cabins, wheel-houses or cooking galleys transferred from some dismantled craft wrecked upon the bay. No two rooms are alike, and all are constructed so as to preserve their original appear-

ance and climatic conditions are exactly similar to those of its native habitat.

The experiments made with this tree in the Carpentaria are a perfect success. At Col. Heath's place, containing about 200 acres, 150 acres are set out in walnuts, which are all bearing fruit. Some of the trees are 23 years old, and last year, each of these old trees produced over twenty dollars' worth of fruit. Other trees are younger, and produced less. The tree is extremely hardy and vigorous. It is not subject to any disease nor affected by any harmful insect or worm. It is as bright and thrifty as any forest tree, and at a distance resembles the oak of native growth. The orchard needs but little care or labor. The weeds are kept down by running a cultivator between the trees in the spring, as often as they make their appearance. One man, with a span of horses and a modern cultivator, can easily keep an orchard of 160 acres free from weeds and in perfect order. No labor is required to gathering the nuts; when ripe, the outer shell opens and the nuts fall to the ground. All that the owner has to do is to gather up the nuts. They are dried in a dry house before being sent to market.

Col. Heath yesterday was so obliging as to stop for us, in answer to a series of questions, the following items about the present year's crop. In regard to the dry year, he said that it makes comparatively little difference with the walnut what the rainfall of two or three seasons may be, as its roots reach to a depth where they obtain abundant moisture.

As to the current report that in some localities the heat and drought have caused walnuts to drop



## VENTURA COUNTY.

**Its Location -- Productions -- Soil -- Oil -- Orange Culture, Etc.**

**Its Valleys, Cities and Towns Described.**

[By the Travelling Agent of THE RESOURCES.]

In 1872, by an act of the Legislature, Ventura county was separated from Santa Barbara, and bounded by that county and Kern on the north and west, the Pacific Ocean on the south, Los Angeles to the east, and includes the islands of San Nicolas and Anacapa. The county contains an area of 1,296,000 acres, and its capabilities to support an increasing population are remarkable. After subtracting all those portions of hilly and mountainous lands too broken for agricultural purposes, there still remains sufficient tillable land to maintain twenty times the present population.

The larger valleys are grain-growing districts, which generally produce without irrigation; but whenever water touches the soil it is prolific in fruits, flowers, vines and vegetables. A few miles from the sea, forests of live oak cover the northern hillsides, while the southern slopes are coated with grass, flowers and honey-bearing sage. The prevailing trees along the water courses, are sycamore, walnut, cotton-wood and some inferior varieties while extensive white oak growths are found in portions of the Ojai, Concho and Santa valleys.

The Santa Clara and Ventura rivers with their tributaries, furnish almost unlimited water power and irrigating facilities. The rivers, running through their respective valleys, carry fertility in their flowing paths to the very verge of the ocean. In none of the southern counties are the two prime necessities—timber and water—more abundant, fuel cheaper or easier of access.

Of the million or more acres in the county, scarcely over one hundred and fifty thousand are under cultivation. Over all the rest roam droves of sheep and herds of cattle, but not as many of these, by any means, as the land is susceptible of supporting. Roads, excepting railroads, penetrate every section of the county that needs them. The shipping points are San Buenaventura and Huene-ma (pronounced Way-na-ma.) From these points run steamers of the Pacific Coast Steamship Company to San Francisco and intermediate ports. The other outlets are main roads leading to Newhall (on the Southern Pacific Railroad), to Los Angeles and to Santa Barbara.

Stages run daily from San Buenaventura via Sateyo and Santa Paula to Newhall, also westward to Santa Barbara; and a tri-weekly stage runs to Los Angeles via Huene-ma, Springville and Concho. Besides a short line to Northridge and Matilija springs, two famous resorts for pleasure and health.

#### Productions.

A glance at the industrial prospects of Ventura county will show that they are bright and diversified, and gradually becoming more so as its wealth becomes more generally diffused. The people follow the pursuits of fruit and grain raising, gardening, oil refining, and make wine, brandy, olive oil, flour, bacon and butter. All grains and fruits of every description grow here in profusion, while all kinds of vegetables do well. Of late, flax has been extensively cultivated, and Odessa and white Russian wheat have proved a great success, and given great impetus to farming. Not less than a million pounds of honey, of the best and purest quality, is estimated as the product for one year from the apiaries of Ventura county; while the wool clip is valued at \$125,000, and the oil region, in the heart of the county, has scarcely been touched.

#### Bee Keeping

Is an unusually important and agreeable industry in this county, and no honey commands a better price in the San Francisco markets. The nice handling required in extracting the honey by centrifugal force, should make this honey preferred to the costliest combed article. All along the numerous ranges of foothills, encircling the great valleys of the Ojai, Santa Clara, Concho, Las Posas, Simi and Tapo, are found the homes of the bee keepers. It must be remembered that there is room for more, as there are bee ranges of vast breadth as yet unlocated save by the wild bees, which are always the pioneers of civilization. It is reported that there are about seven thousand stands of bees in the county, averaging about one hundred and fifty pounds per stand. At an average price of eight cents per pound, a handsome product of the busy bee is secured.

As before stated, flax is a notable industry, and might, with more care, be really made a greater source of wealth. This is now grown solely for the seed, which is shipped to San Francisco for the manufacture of linseed oil. Each acre cultivated for seed is good for a ton of straw, and there is probably more than two thousand tons of straw in the growing crop, which could be delivered at ten dollars per ton in San Buenaventura. If a suitable paper-mill was in operation to work it up into paper. But it seems that more could be made out of this industry by saving the fibre for twine and bagging; while this would only be opening the door to a wider industry, the manufacture of linen fabrics, capitalists, finding a steady supply of flax

fibre being raised, would soon erect mills wherever there is water-power and bleaching grounds.

Besides the raising of flax, considerable oyster seed is produced, which is quite as remunerative as barley, and no more care or skill is required in its development. There is, of necessity, quite a demand for this seed, as the numerous canary birds in this State subsist in a great measure upon it.

#### Oil.

There is a large area of country comprising the oil belt, fifty miles in length and twenty-five in width. This section begins at Rincon creek, and extending across portions of the ex-Mission and Ojai ranches, through Santa Clara valley, and Los Angeles county to Newhall. There are large shipments made from Newhall of this oil, which is of a good, pure quality. At Sespe, twenty-seven miles from the wharf at Ventura, there is an elevation of fifteen hundred feet, and the oil can be run in smooth pipe down to tide water. At Pinafere wells, there are two tunnels discharging into tanks, which might be conducted to the wharf with about seven miles of pipe. More capital is required to fully develop this important industry.

#### Olive Culture.

This branch of industry increases yearly. The trees will bear and flourish with little moisture, no irrigation being necessary, and the cuttings from which the tree is propagated can be purchased at the extremely reasonable sum of two cents each; and at a cost of ten dollars, five acres may be set out. The fifth year the tree bears a few berries, and at the end of the seventh they bear largely, bringing in a profit of \$500.00 per acre. In nine years, the trees, then in full bearing, will yield an average of fifty gallons of berries, or twenty-five quarts of oil, which can readily be sold for \$25.00. The cost of cultivation and of making the oil averages \$5.00 a tree, leaving a profit of \$20.00 per tree. The olive trees growing in what was once the old Mission orchard, are a guarantee that this culture is an exceedingly profitable one as well as positive proof that this climate is favorable to their growth.

Walnut and almond trees flourish in all the valleys where they have been planted. On Ventura avenue may be seen walnut trees of great beauty and size for their age. The walnut seems to be especially adapted to this county, and is quite as great a favorite, as it bears in the fifth year, thus showing it to be a rapid grower and prolific bearer.

Raisin grape culture is also a surety; Santa Clara valley being unsurpassed for extent and fertility in this pursuit. The cost of a vineyard is but little more per acre than the cost of an olive orchard, and the crop in the third year after the cuttings are set out will nearly pay the expense of cultivation, and by the fourth year the vines are nearly in full bearing, and sold to the wine maker, the net profit is from \$50.00 to \$60.00 per acre, and if made into raisins the profit is about \$200.00 per acre, or more, as is frequently the case.

There is an immense grape vine growing in this county, as well as in Santa Barbara county. This one is owned by Senor Moraga, who lives in Ventura valley, above the avenue. It is over seventy years of age, and measures about three feet around the trunk; it is trained over a framework, and produces annually some thousands of pounds of grapes. This fact tells its own story of the home of the grape.

#### Orange Culture.

Not the least of the many productions and growths of this county are oranges and lemons. For thirty years these have been successfully grown and the fruit is of the best quality and flavor. New orchards are constantly being set out, and many are just coming into bearing; those around Oxnarda and Tapo are in full bearing.

Lemon culture is nearly as profitable as that of oranges, and the process of cultivation is the same. The tree matures two good crops annually—one in January and one in July. They yield sooner than the orange, and are now utilized in making white brandy, which is of a very agreeable flavor and odor; it is a product from the juice of the lime and lemon. In the manufacture of citric acid from this source; it can be obtained in considerable quantities by simply fermenting the fresh juice, by which process their saccharine contents are converted into alcohol, which is distilled in the customary manner, leaving citric acid as a residue, which becomes purified to a certain extent by being freed from its saccharine and mucilaginous constituents.

#### The Mission.

On the southern slope of the town of Ventura stands the ancient mission buildings, founded in 1782, more than a century ago, by the vated Father Junipero Serra, the president of all the Franciscan missions in California. The old Padre was indelible in his efforts to establish these institutions and worked unceasingly all his busy life, which terminated at the age of seventy-one years. He was one of the first to instill into the minds of the natives the principles of morality and industry, and trained them in agriculture and horticulture as well as in morals and religion.

The mission archives are in a fair state of preservation and are well worth a visit. The church,

is as usual in the mission buildings, is built of adobe, with stone foundation; the mortar that was used is as hard as the rock it cements.

A plaza, enclosed by buildings in a state of ruin on the east and north, includes, besides the church, the old burying ground on the west of the main building, where sleep the dead in the shadow of the church they built. The area in front is reached by a flight of eight steps; on the right stands a massive Moorish tower, which acts as a substantial buttress to the east wall of the church. The interior is also well fitted up, and is a decidedly interesting spectacle.

#### The Town

Of Ventura, the county seat, is located on the sea shore, near the mouth of the San Buenaventura river. The land has good drainage, as it slopes from the surrounding hills to the ocean. Embowered in luxuriant growths of eucalyptus and pepper trees, the town appears quite attractive and picturesque, with its school buildings, plazas, palms in the old Mission orchards, oil refineries, and the court house, dwellings, hotels, stores, churches and warehouses, arranged in their proper locations.

The bank of Ventura is a flourishing institution, doing a commercial banking business. The officers are Thomas R. Burt, president; D. S. Blackburn, vice-president; Henry Olaj, secretary and cashier. At the Palace Hotel is the office of the Los Angeles and Ventura stage line. At this hotel the best accommodations can be found, as is also the case at Ayer's Hotel. Commercial travelers speak well of both, as they are ranked first-class. At Ayer's Hotel is the telegraph stage line's office.

Hicks and Archibald carry the largest stock of harness, etc., in San Buenaventura. Mr. Archibald is the sole manager, having recently opened business in the old stand of Charles Barlow. Mr. Archibald has improved the salesroom by putting in a show case and other improvements, where his fine saddles and harnesses are displayed to advantage. Having had an experience of twenty years, he is a first-class workman, well worthy of public patronage.

Mr. J. Richardson is an enterprising manufacturer of furniture and building. He employs on an average about five men; his store is 35x150 feet in size, and on California street its dimensions are 50x100 feet; an eight horse-power engine runs the works.

Chaffee, Oilbert and Bonstell are importers and dealers in general merchandise, farming implements and lumber, and pay the highest price for wool, hides, grain and produce.

The drug business is well represented by two stores; one, the Pioneer, is kept by Mr. Edward Taggart, an affable business man; and the other, called the Ventura Drug Store, is next door to the post office. Mr. N. T. Cody is the proprietor, and has a great variety of family medicines, perfumery, brushes, etc. Mr. Cody is agent for Wells, Fargo & Co.'s Express.

Joseph Roth is a manufacturer and dealer in boots and shoes; his store is on East Main street, and is the largest in the county. Mr. Roth is a pioneer dealer and employs two or three men. He is an importer of eastern goods and saves the middle commission, thus being able to sell goods cheaper than any house in town.

Mr. E. Hershfelder is in the same business, and also deals in gent's furnishing goods, hats, caps, etc.

On the north side of Main street, opposite the Free Press office, Bartholomew Bros. are located. They are excellent jewelers and deal extensively in solid silver and plated ware. Watches with Bosc's patent case are a specialty, as is also careful repairing of all kinds of broken jewelry. This firm deals also in music and musical instruments, books and stationery, and have a news agency. They are agents of the Pacific Coast Steamship Company, and are prepared to furnish emigrants from Europe with tickets on the very best of terms, being agents for the old and reliable Hamburg-American Steamship Company. Parties residing on the Pacific coast, by simply applying at this store, can purchase tickets that will take passengers to and from any part of Europe. They will also issue bills of exchange on any city in Europe, so that purchasers may either procure their tickets at this office or at the home office, and all sums of money are remitted at the very lowest rates, and any information in regard to the agency will receive prompt attention.

The favorite drives out of town are delightful, and expansive views of hill, river, ocean, light-house, etc., are to be had. O. R. Logue and others have first-class turnouts and saddle horses always on hand at moderate rates.

Blacksmithing and horse shoeing are well done at McDonnell Bros., corner of California and Santa Clara streets.

#### The Press

Is well represented by the Ventura Free Press, McLean and Sons, publishers and proprietors; and by the Ventura Signal, Sheridan Bros., publishers and proprietors. Both newspapers are wide awake to the demands of the progressive age in which we live, are ably conducted, and devoted to the interests of Ventura county and southern California.

A public library and reading-room are well patronized by the reading public.

Masonic and Odd Fellows hold meetings in Spear's Hall, while the Good Templars have fitted up a hall on the south side of East Main street. The court house is hidden behind a double row of olive trees, in what was once the old Mission orchard. Noteworthy are two date palms that grow between the hotels and court house; they are the largest in California, and were planted by Father Santa Maria over a century ago from seed he brought from Spain.

There are two oil refineries near the war-houses and wharf, making both illuminating and lubricating oil, using asphaltum for fuel. Near the mouth of Ventura river is another oil refinery.

Two lumber yards supply the demands in their lines, and a fine quality of brick is the neighborhood from red clay. These bricks are used for many buildings, and are supplanting the old time adobes.

#### Santa Paula

Is next in size to the county seat, and the center of a choice fruit and farming section, as well as the petroleum region. Being supplied with delicious water from Santa Paula creek, through pipes, from an elevation of eighty-five feet, it is, of course, comparatively free from danger of fire or annoyance from dust. The area of this valley is seventeen thousand acres, and more inhabitants are needed to utilize this fertile section. Corn is principally raised here, because the rank wild mustard outgrows small grain so as to overshadow it entirely, but this is only in particular places. We have seen a field of fifty acres of Odessa wheat which will yield at least fifty bushels to the acre. In all directions around here, the success in raising Odessa wheat insures great wealth to the county.

There is a fine flouring mill situated at the mouth of Santa Paula creek, owned by Messrs. Blanchard and Bradley, and run by water power. They make an especial fine brand of "middlings purified," which is much sought for in the markets here, and preferred by many to that made in other localities. Messrs. Bradley and Blanchard have an orange orchard of one hundred acres in the neighborhood of Santa Paula, fenced with a hedge of limes along the public road. Great groves of eucalyptus trees as thick as they can grow, tall and symmetrical, are to be seen in this vicinity, but the orange culture is superior here, and there are many groves in most excellent condition.

School houses, post-office, express, telegraph and stage offices and stores are to be found at the village. Mr. C. N. Baker is owner and proprietor of the Santa Paula hotel, established since 1879. It is a first-class hotel and can accommodate all guests who seek rest and quiet and a pleasant home.

#### Huene-ma

Is thirteen miles from San Buenaventura, in a southerly direction, the road running over a mesa, rising gradually up to its highest part and descending to the Santa Clara river, at the ford six miles from either place. The country between the bluffs of the river is nearly level, covered with vast fields of grain and flax, with farm houses clustered among stately groves of trees, while most of the fields are unfenced and reach far and wide.

Here is the "fairy tower of Colonia," owned by J. G. Hull, and the handsome residence of Thomas R. Bard, to whom the writer is greatly indebted for the interesting statistical and otherwise instructive matter in this article. Mr. Bard has been first in furthering the interests of this section, and too much praise can not be given to one who has been of such public benefit at home and abroad.

At Huene-ma can be seen the octagonal shaped United States light-house, built on a point about a mile from the town. A revolving light throws its illuminating, friendly beams upon the ocean, guides the weary mariner, and lights up the port at night to great advantage.

Huene-ma is the shipping port for all that part of Ventura county lying south of the Santa Clara, and was made a port of delivery by a recent act of Congress. The lands tributary to this port comprise about two-thirds of the arable lands of the county. The town was laid off in 1872, by the efforts of Thomas R. Bard. A new town hall was built in 1883, and the village possesses a public library, containing over one thousand volumes, and a public reading room, open every evening, has been recently founded, and is supported by voluntary contributions of the residents of the town and vicinity. A Methodist church building was erected last summer at a cost of \$3,500, the whole amount having been provided for. During the last year, a large irrigating ditch, sixteen miles in length, was constructed, bringing water from the Santa Clara river through the lands of the ranches Santa Clara del Norte and La Columna to a point near the town. It will be used only for irrigating alfalfa fields, but will be ample to irrigate ten thousand acres if ever needed. Alfalfa does not need irrigation on these lands, except for the purpose of destroying gophers. On some fields of alfalfa near Huene-ma, which have never been irrigated, hay was cut within the year 1892, eight times, having produced about twelve tons to the acre.

Artesian wells of excellent water, supplying sufficient quantities, in many cases, to irrigate two hundred acres, are obtained at depths of one hundred and forty feet, all over the valley. One supplies the shipping and the town with water.



The wharf extends out eight hundred feet to twenty fathoms of water. Four large warehouses, the two largest being each three hundred and fifteen feet long by sixty-six feet wide, are connected with the wharf by rail.

Hueneme is independent of railroads to a greater extent than any other place in southern California, for the reason that the large fleet of sailing vessels which trade between the lumber districts and the port of Wilmington, (from which all of Los Angeles and Arizona are supplied with building material, etc.), come without ballast to Hueneme, the nearest port, where they can get a return cargo of grain to San Francisco at all times; and owing to this circumstance the freight from Hueneme to San Francisco on grain and other products, is about one-half that paid at all other points in southern California. The freight from Hueneme, by schooner, is \$1.50 per ton, from San Buenaventura, by steamer, \$3.00 per ton.

The productions of the adjacent country are varied. The statement herewith compiled from the books of the Hueneme Wharf and Lighter Company will furnish accurate information concerning the magnitude and variety of agricultural productions of the adjacent country.

A railroad is projected from Hueneme to Newhall by T. R. Bard and others interested in the wharf, warehouses and town of Hueneme, and in the ranches Simi and Las Posas aggregating 140,000 acres, and La Colonia, 30,000 acres. If such a road be completed it will make connection at Newhall with the Southern Pacific system, thus furnishing increased facilities in Arizona and New Mexico for marketing the large agricultural productions of this valley. But in view of the very great advantages that are offered by the ocean transportation at Hueneme, the doubt is expressed whether the projectors really mean to make such connection, or that the road will be built as an adjunct to the wharf and for the benefit of the lands of the projectors.

The following is a statement of produce received at Hueneme wharf and warehouses for each season, ending March, 31st, for the last eight years:

	1876	1877	1878	1879	1880	1881	1882	1883	Total
Barley, acres	179	844	790	715	50	818	229	141	292,005
Corn	10,716	9,231	3,128	31,438	10,888	29,165	6,229	1,760	169,290
Wheat	9,671	7,418	505	6,120	10,888	29,165	6,229	1,760	169,290
Alfalfa	800	272	272	272	272	272	272	272	2,176
Oranges	4	4	4	4	4	4	4	4	36
Apples	30	30	30	30	30	30	30	30	240
Prunes	100	100	100	100	100	100	100	100	800
Almonds	10	10	10	10	10	10	10	10	80
Walnuts	10	10	10	10	10	10	10	10	80
Butter, boxes	184	330	302	210	6	14	170	203	1,664
Wool, bales	1,387	1,771	1,502	1,021	1,648	1,020	670	1,134	10,972
Hay, tons	2,525	4,830	650	4,367	10,495	8,277	2,886	4,648	46,448
Grain, tons	107	120	114	127	113	133	131	120	1,020
Almonds, sacks	302	100	100	100	100	100	100	100	800

The village is flourishing, and besides the advantages before mentioned, there are three stores, a telegraph and post office, wharf and steamship office, blacksmith shops and the Pioneer hotel, of which John E. McCoy is the proprietor. The house is a good one, and is the only hotel in the town; twenty guests can be accommodated, and terms are moderate.

R. G. Livingstone is a wholesale and retail dealer in general merchandise, and this is a store where all will find it to their advantage to visit.

The school house is a prominent building, as it should be, and the churches are also pretty and well attended.

This little town is the shipping point of that large and rich agricultural valleys of Simi, Conejo and Santa Clara ranches, Pleasant valley and the products of the wonderfully rich lands of the Colonia ranches. The town is situated on nearly level ground almost touching the sea, only a sandy beach intervening. The town, so richly assisted by the indomitable energy of Mr. Bard, will grow and expand as long as freight can be more cheaply floated on waterways than rolled on railways. A mild climate prevails here; the sea breeze flows from the west, and this will, in the future, be a popular sea side resort for bathing, fishing and sailing over to the islands. One island, Anacapa, twenty miles away, is especially attractive.

#### Northoff.

The Ojai (pronounced Oh) valley and rancho

lies principally between the Ventura river on the west, and San Antonio creek on the east, and is about twelve miles from the sea port of San Buenaventura. This magnificent rancho of over seven thousand acres is covered mostly with forests of live and white oak, particularly around Northoff, which is in their midst in a stretch of the valley at its broadest part. Northoff is prettily nestled in the bosom of the Ojai, and the salubrity of its climate is unequalled. The valley of Ojai is free from excessive winds, fogs and dust—the number of cloudy days is small, and the average rainfall, fifteen inches. Here, where modern civilization has commenced to assert its influence, is a climate where exercise is a delight, where sleep is "tired nature's sweet restorer," and where appetite finds a wholesome stimulus. Important as is this region as a pleasure resort, it is far more so from its agricultural and pastoral industries. It is in the Ojai that the wheat crop reaches its

ridge with a scattering growth of live oaks upon it. Thousands of acres of grain cover the entire basin, reaching far up the sides of the hills. Here, as around Northoff, agriculture is the chief industry, and a succession of broad fields fill it with luxuriance. This valley has no industry not connected with agriculture. On the hills, all the usual northern farm crops thrive remarkably; also the vine, fig and, in fact, all semi-tropical fruits and flowers. The land is almost exclusively owned by those who cultivate, and, as is usual in great agricultural communities, the people are prosperous and even wealthy. There is an air of comfort about the homes, notably a great profusion of flowers, fine orchards and shade trees. Commodious, home-like mansions, overlooking pleasant gardens, are by no means uncommon. No irrigation is needed or at least used for the small grain crops. Artesian water is obtained at Northoff, but not in such quantities as at Hueneme, on the Colonia rancho.



In the easy valleys of the hills are the live oaks, homes, and lower down are farmers, dairymen and orchardists. The vineyards and apple orchards are marvels of beauty, and supply the resorts with fruits, honey and fresh butter, and the sheep owners supply juicy mutton.

#### Siati Rancho

Is vast and magnificent in area, being ninety-six thousand acres. This is owned by Mr. Barker Hummer; Mr. Thomas R. Bard, of Hueneme, being his agent. The scene is a wilderness of live oaks and rocks, massive as fortresses, environ Susann pass, and anything more wild in natural scenery could hardly be imagined. Fields of green wheat cover the wide plains, and here and there, though far apart, stand the quaint farm houses of this region. Sheep-raising is extensively carried on, as alfalfa is plentiful. The timber lands are principally on the hills, and comprise forests of oak trees. Ten thousand acres of wheat or fruit lands are here awaiting development.

There is an old rancho, called the Tupo, lying in the northeast corner of the Simi, originally a portion of it, and contains fifteen thousand acres; fifteen hundred being arable, the remainder are grazing lands. Every variety of fruit known in this climate, from apple to orange and lemon, are grown in this fertile soil. There is a vineyard forty years old from which superior wines and brandies have been made. The land is for sale by the owners, gentlemen living in San Buenaventura and Santa Barbara.

#### El Conejo Rancho

Comprises 49,000 acres of black loamy soil, rich and deep, inexhaustible in fertility, and owing to its elevation above sea level and distance from the ocean, it is all that could be desired for the production of wheat and culture of the finest semi-tropical fruits and flowers. The grazing lands are among the best in the country, and over twenty thousand sheep are grazing upon the fine, rich pastures of the Conejo mountains. Bee raising, wheat growing, etc., are well practiced, and grain is plentiful. Stages afford a cheap and easy mode of conveyance to and from this beautiful and valuable ranch, three thousand acres of which are for sale by Mr. Hamell.

#### La Colonia

Is one of the largest ranches of the county, containing forty-five thousand acres, thirty-five thousand of which are tillable. It has abundant water supply through artesian wells, and its large grain fields are not irrigated. Rapid growth in oranges, lemons, figs, pears, English walnuts, quinces and apricots are fully demonstrated. Hog raising is here found to be one of the most profitable occupations. The lands are level, very few breaks being seen. The soil is rich and retentive of moisture to a remarkable degree. Land is for sale by Mr. T. R. Bard, throughout and principal owner, who with his usual liberality is offering superior inducements to renters and purchasers.

#### Sespe Rancho

Is two miles from Santa Paula, and has been used principally for cattle, sheep and horses to range over. The land is rich and fertile, and above the upper limits, on the little Sespe, is situated the oil wells of the Los Angeles Oil Company. The oil is fifteen hundred feet below the surface, and is carried by pipes to the refinery of E. A. Edwards. The valley is prolific in oranges, figs and other choice semi-tropical fruits.

#### Cumulos

Tomocul, or Cumulos rancho, is next above Sespe on the stage road. Oranges, a very glory springing from her soil, are noted everywhere as the finest found in the markets of southern California. Lemon trees are in bearing, and five hundred olive trees are in full bearing, besides forty thousand grape vines, yielding annually about ten thousand gallons of wine and three hundred gallons of the famous brandy known as the "Cumulos." Cumulos, the home of a noted Spanish-Californian, Don R. F. Del Valle, is most elegantly fitted up in all its appointments of buildings, and exhibits a greater variety of flowers, vines, etc., than any Spanish-American home seen in California.

San Francisco, Ex-mission Santa Ana, Guadalupe, Collegios, Santa Clara del Norte, Las Posas and San Magdalita ranches, are all deserving of mention, but space will not permit more in this issue.

#### MINING AT BADGER HILL.

About twenty years ago, a party of miners commenced sinking a shaft on Shady creek near the town of Cherokee, and after going down 150 feet or so they abandoned the work. Since then Joe Hunter has purchased all of the surface ground in that neighborhood and is now preparing to sink a shaft at, or near the old one, to bed rock. Recent rich discoveries in the Badger Hill mine have given a boom to mining in that locality, and it is now said a tunnel will be commenced in the near future to tap the mining ground lying between Badger Hill and Cherokee. It is said ungets of large size have been found in the Badger Hill mine.—San Joaquin Times.

maximum of quality and quantity. The traveler along the roads, in all directions, sees wheat everywhere, growing even amid forests, where trees appear to be just far enough apart to let in the sunshine sufficiently to keep an even growth of grain. These trees are the white oaks which grow in the valleys, while the evergreen live-oak loves the steeper hillsides and deep valleys. The scene approaches, in its perfect cultivation and prosperous air, the noted Saticoy and Santa Paula settlements. The Northoff hotel, Glen cottage and a number of other cozy cottages are open for visitors, and their proprietors make their guests at home, and by so doing induce the many people to return to them year after year. To those who have already visited Northoff, it is not necessary to tell the story of its charms; but there are many who have never been fortunate enough to obtain a glimpse of its loveliness.

The upper Ojai is a basin-like valley, with its bounds rising in precipitous to the foot of its enclosing hills, and separated from the main Ojai by a

ridge six miles northwest of and eighteen miles from the town of San Buenaventura. Here are located the famous Mantilija hot sulphur springs, which are shut in from winds by the surrounding wooded mountains. There are twenty-two springs, and it is a remarkable fact that the quantity of water discharged never varies. It is the same in the hottest and driest weather, and they preserve a uniform temperature. Their effects are especially notable in cases of rheumatism, dyspepsia, irritation of the mucous membrane of the stomach and bowels of the kidneys and liver. The springs are about fifteen hundred feet above the sea, and a little way beyond the Ojai valley. The pure mountain air, and the freedom from dust and wind are beneficial to health, and when added to the recuperative qualities of the springs, one feels as if they were second to none in the State. A hotel and a number of cottages are at hand, as are facilities for hot or cold baths. The mountain streams abound in trout, and there is plenty of game for the hunter.



# SANTA BARBARA COUNTY.

Its Climate—Fruits—Cereals—Sheep—Business, Etc.

Principal Cities and Towns Described.

[By the Traveling Agent of THE RESOURCES.]

Santa Barbara, one of the four semi-tropical counties of California, is bounded by San Luis Obispo county on the north, Ventura on the east, and on the west and south by the Pacific Ocean. Santa Barbara channel, and its many islands, lie to the south. The general coast line stretches to the eastward from Point Conception, shaped by the Santa Ynez mountains, which rise to a height of from 3,000 to 4,000 feet. North of the Santa Ynez range, is a parallel chain known as the San Rafael range, which runs northwesterly. The foothill lands are especially valuable as ranges for sheep, cattle and stock generally, which graze here the year round. It is a fact that there is little or no land in this county which can not be utilized for some purpose.

Between the mountain ranges lies the lovely little valley of Santa Ynez, which widens out in pastoral beauty, watered by a river of the same name, winding down to the Pacific Ocean. This valley is on the line of the stage road between Los Alamos and Santa Barbara. Here, within the past year, a new town has been laid out, and we anticipate for this section a bright future. The lands lying in this and the Santa Maria valley are unequalled in richness of soil and variety of production, unless, indeed, the valley of Santa Barbara be superior.

At Gaviola, forty miles from Santa Barbara, the Santa Ynez draws so closely to the ocean as almost to forbid a passage between. A mountain stream has cut a passage through the range, crowding among the precipitous rocks down a narrow defile. With lofty cliffs on either side, the rushing torrent bounds into the sea; carrying boulders in its arms, it tears up the road, and adds a sublime and rugged grandeur to the scene.

From the top of the mountains a lovely scene lies spread below; a little valley whose waving crops of grain form a most pleasant contrast to the pastoral strip along the sea. A little gorge cuts this valley and over its summit falls a stream of water a distance of one hundred and twenty feet, making a picturesque miniature Yosemite. A cool, dark ravine, called Nojoqui, presents a pleasant camping place on a warm day. Crossing a few more spurs in the main valley of Santa Ynez, one comes to the mission crowded mesa.

The mission buildings stand on high ground, three miles from the beach, west of the town and above it, looking towards the sea. In the morning, the sun's first rays flash full on the western walls. They are an undeniable benediction to the place; the longer one stays here, the more he is aware of the benign influence upon his soul, and of the importance in the landscape of the stately pile. On the corridor of the inner court hangs a bell, which is rung for the hours of the daily office and secular duties. It is also struck whenever a friar dies, to announce that all is over. It is the duty of the brother who has watched the last breath of the dying one, to go immediately and strike the bell. Its sad note has echoed many times through the corridors. The Santa Barbara mission is still in charge of the Franciscans, the only one remaining to their possession. It is now called a college for apostolic missionary work, and there are now living within its ancient walls eight members of the order. One of them is very old, and his benevolent face is well known throughout the county.

There is the same element of romance in the history of the agriculture of Santa Barbara, as is seen in all else relating to the growth of California. The old Spanish missionaries proved the adaptability of its soil, both to fruits and grain. The Mexican ranchero, or herdsmen, followed the missionaries, and great droves of horses and cattle ranged over the hills and valleys. Grapes and olives were planted by them, and grew and flourished luxuriantly. Until within a few years, no other grape has been cultivated but that domesticated by the old friars, and known as the Mission grape. This varies with the soil and culture, but everywhere it is strong and vigorous, both as a vine and fruit-bearing, and is rich in wine-making qualities. New and better varieties of the grape are now cultivated, and the grape culture is pre-eminent among the profitable industries.

Santa Barbara county is unequalled for growing fine fruits and vegetables, which are produced throughout the year in the greatest abundance and variety; an astonishing and irrefragable fact to the Eastern visitor, who finds there and a balmy climate in the months of January, February and March, the coldest months in the East.

The soil is rich and is cultivated at little expense. Labor is dearer than in the Eastern States, yet food of every variety can be purchased as cheap, if not cheaper, than in the East, and the harvests produce a more generous profit. All this is accomplished in a country that values and other immigrants, in the pioneer days, cursed for its barrenness, while they ate flour from Michigan and Indiana, sent here all the way from New York around Cape Horn, and

retailed at from twenty-five to fifty cents a pound. The soil being rich, little manure is required, and that being well utilized, but little irrigation is resorted to, the water shed of the mountains adding to the beautiful winter supply.

Large farms are the great evil in this county, as well as in others in the State, and the great requirement is small farms and small farmers, making homes of comfort upon the land, and gradually, but surely improving the soil, as well as the condition of society. There are very few fruits and vegetables that may not be grown and developed here; thus making all independent of the market, and ministering to the wants and tastes of many non-residents as well. Those farmers who have means to buy a home and maintain themselves for one year, have a living insured if they will enter into varied culture, as orchard and garden go far to supply the table during the whole year in this climate. The culture of flax is especially profitable; beans yield a fair return; hops and tobacco bring next in importance, and the dairy product paying handsomely.

## Climate.

The climate of Santa Barbara, for salubrity, cannot be excelled by any in the world. A record of the weather, kept by an invalid who spent a year in this delightful spot, shows 310 pleasant, sunny days out of 365. The heat is modified by the cool air from the surrounding hills.

## Olives.

The olive industry of southern California is an exceedingly important one, and its oil is well known and appreciated; its taste, it is a revelation to palates accustomed to the vile compound of rancid coconut and cotton-seed oil. The olive, in this country, is one of the leading industries of this and other counties in this section of the State, as vast tracts of land, which are not suitable for orange, grape or grain culture, afford ample support to the thrifty and unexacting olive. Italy's olive crop is worth, annually, thirty million dollars, and California has as much land suited to the olive culture as Italy. It is estimated that the product of an acre of olives trees, in full bearing, will pay fifteen hundred dollars per year if pickled, and two thousand dollars if made into oil.

The tree is propagated from cuttings, and begins to bear in the fourth year, and is in full bearing in the tenth or twelfth year. One hundred and ten trees can be planted to an acre. Some of the orchards planted by the friars at the mission over a hundred years ago, are still bearing, in spite of scores of years of neglect, and some have been known, in old countries, to have been in bearing several centuries.

The process of oil making is an interesting one. The olives are first dried in trays, having slat bottoms; then upon tiers of these being piled in a kiln over a furnace fire. They are then ground between stone rollers, worked by huge wheels turned by horse power. The oil thus pressed out is poured into large butts or tanks. Here it is allowed to stand and settle three or four months. There are fanciers at different levels in these tanks to draw off different layers of oil. After it has settled sufficiently, it is filtered through six layers of cotton batting, then through one of French paper before it is bottled. It is then of a delicate straw color, with a slight greenish tint; not at all of the golden color of the ordinary market article. That golden yellow, and the thickening in a cold temperature, are pure proofs of cotton-wool in the oil; this pure oil remaining limpid in a degree of cold which will turn the adulterated vile white and thick.

The almond has been cultivated to some extent, but is gradually being abandoned, as the crop is a disappointing one, uncertain in yield and troublesome to prepare. The nuts must be five times handled: first picked, then shelled, then dried, then thrashed and again dried; after the first drying, they are stored by basketfuls into hot water, then poured into bushels—bins with perforated bottoms. Underneath, there is a sulphur fire to which the nuts must be exposed from five to ten minutes, and then spread in a drying house. The final gathering sends them to market and makes, in fact, a sixth handling, and after all is said and done, the nuts are not very good, being flavorless in comparison with those grown in Europe.

The walnut orchard is a better investment, and no less a delight to the eye. While young, the walnut tree is graceful, and when old it is stately. It is a warmly bearer, and, if it did not bear at all, it would be worthy of an honorable place on home estates, simply for the grand shade of its ample foliage. It is grown from the seed and transplanted when two or three years old, allowing only twenty-seven trees to the acre. They bear when ten years old, reach full bearing at fifteen, and show no signs of falling at fifty.

## Sheep-raising.

Is, on the whole, an industry that is said to be decreasing in the State. In 1876, the wool crop of the State was 28,000 tons; in 1881, only 21,500 tons. This is the result, in part, of fluctuation in the price of wool, but more of the growing idea of the greater certainty of profit from agriculture and horticulture. The cost of keeping a sheep averages only \$1.25 per year. Its wool sells for \$1.50, and for each one hundred sheep there will be about

forty-five lambs, worth seventy-five cents each. The dry season, however, often creates great havoc among the flocks, as in one season over a million sheep have perished from starvation, and thus there is always the risk of losing in one year, the profits of many.

Sheep shearing is carried on on large farms in sheds, often sixty feet long, by twenty-five men; small flocks of sheep surrounding it on three sides. Here, men bent over at every angle, the sheep being tightly held to all possible positions, shears flashing, glancing, clipping; bright Mexican eyes shining, Mexican voices jangling, the patient animals are speedily divested of their woolly covering. Less than five minutes elapse from the time a sheep is grasped, dragged in, thrown down and placed between the shearer's knees, until it is set free, clean shorn and its three pound fleece tossed on a table outside, where it is baled for shipment. A good shearer shears seventy or eighty sheep in a day; men of extra dexterity shear a hundred. The Indians are famous for skill at shearing, and in all their large villages are organized shearing bands, with captains, who go from ranch to ranch in the shearing season.

## Carpentering.

The Carpenteria valley produces Lima beans in great quantities, as the soil, and the peculiarity of the delightful climate, makes this valley their natural home. Parts of the valley are dotted with grand live oaks, which make it altogether a pleasant spot to visit. The valley is some fourteen miles south of Santa Barbara, and is reached by Allman's stage line which connects Santa Barbara with the S. P. R. R. at Newhall. Carpenteria has a hotel, where good meals are provided, a stage station, school-house, and a church, built by means of one lady's exertions and money, but in which all denominations may worship.

The Santa Maria valley lies in the northern part of Santa Barbara county. The valley is some twenty miles square, the soil being a light, sandy loam, producing rich crops of corn, wheat, barley etc., without irrigation; although wheat is the principal product. Dairying is extensively practiced on the coast line of the valley. The Pacific Coast (Narrow Gauge) R. R. runs through it, thus giving rail communication with Port Harford and San Luis Obispo. Almost in the center of the valley is located

## Santa Maria.

A pretty little village of 600 inhabitants. The valley and town is surrounded by hills on three sides, and the force of the sea breeze is broken by the sand dunes along the coast. In 1871 the town was laid off on a plot of 640 acres, with streets 100 and 120 feet wide respectively. Being supported by a large farming and stock country, this is a thriving, growing town; the outlying country being well able to support three times the number of inhabitants. The town has two commodious public halls, a Masonic hall, three churches, three hotels, two drug stores, four dry goods stores, livery stables, hardware, tin, harness and blacksmith shops, meat market and a mill. Schwartz & Beebe have a lumber yard, and two large store-houses at the station for grain. A weekly paper, the Santa Maria Times, is ably edited by S. Clevinger. A daily stage connects Santa Maria with Guadalupe, situated ten miles distant toward the coast. Real estate is active, selling at from \$15 to \$30 per acre, and prices advancing. Town lots, 25x140, sell at from \$1.00 to \$20.00 the front foot. Storrell & Thornburg are the managers of the Santa Maria Valley Land Bureau, and will be glad to furnish information relative to the real estate business in this county.

The Santa Maria mill has a capacity of eighty barrels per day. Their flour finds ready sale in home, as it is made by the new process, "roller system." This firm has been established since August 1882, and the mill is situated on the line of the railroad, in a good location for receiving wood and shipping wheat and flour.

The Solzwick Hotel is a temperance house, and a good stopping place for travelers. Ayres & Hobson, formerly of Guadalupe, also having a branch at Los Alamos, are dealers in musical instruments, books and all articles in that line, as well as in drugs, etc.

Among other business men, may be mentioned the following: T. Jones & son, dealers in stoves, hardware, tinware, paints, picture frames, furniture, machinery, etc. Goodwin & Brant, cash dealers in fancy and dry goods, groceries, etc., and Kreidel & Mosher, wholesale and retail dealers in general merchandise. They were the first merchants in Santa Maria, having been established only in the year 1875. They are also agents for Wells Fargo & Co.

The handsomest and most commodious store in Santa Maria is owned and built by Kaiser Bros. & Co. The new store is eighty-two feet long and sixty-one feet wide, divided into a main store in the center, twenty-nine by eighty-one feet, with two finished warehouses, connected with the main rooms by arches fifteen by fifty-six feet; also connected with the store in the rear of the building. On the side are two sitting rooms, one for ladies and one for gentlemen, fitted up with grates and stationary wash-stands, for the accommodation of pilgrims. On the opposite side are sleeping apartments, with bath room and closets

between. In the rear is the large and commodious office, with a private office connected. It is neatly finished and furnished. This fine building was erected at a cost of \$10,000 and is a credit to the architect, L. F. Bickman, and the firm of Kaiser Bros. & Co. They do a business of \$100,000 per annum and it is rapidly increasing. They have also a large warehouse for grain and produce, and deal in dry goods, notions, crockery, glass ware, clothing, boots, shoes and hardware.

Mr. B. F. Bell is a dealer in all kinds of hardware, stoves and tinware, blacksmith's supplies, brass goods and fittings, paints, oils, etc. Mr. Bell is from Butte county, has recently located here, and is prospering in his southern undertaking.

Robert Brown is the oldest established blacksmith in Santa Maria, having settled here in the spring of 1875, and is doing a profitable business in general blacksmithing, wagon and carriage making. Kraben Hurt is another first class blacksmith, wagon and carriage maker; he also manufactures Hurt & Nicholson's champion gang plows, which are superior to any plow we have seen in our travels. It is to the enterprise of such men as Mr. Hurt, we owe many of our improvements in useful machinery. Mr. Hurt also has an improved barley crusher run by steam power.

## Los Alamos.

Is situated on the line of the railroad, some twenty miles from Santa Barbara. This valley is long and narrow and very productive, and a desirable part of the county in which to locate. Los Alamos has 300 inhabitants, and is a growing little city, being the terminus of the Pacific Coast Railroad, and where the stage line begins leading in Santa Barbara. A ride over the Gavito mountains, and this stage line, is something worth taking, for the scenery is superb. Lompoc, also on this route, some ten miles from Los Alamos, is a genuine temperance colony.

Los Alamos has a fine hotel, called the Union; it is well supplied with pleasant rooms and has a good cuisine.

Langhin Brothers are dealers in general merchandise in Los Alamos, and have a branch at Guadalupe, under the firm name of H. Langhin & Co. They have been established nine years, and are doing a good business.

## Santa Barbara.

Is 300 miles from San Francisco, from which place the Pacific Coast steamers run twice a week, requiring thirty-two hours for the trip and charging ten dollars for the fare. The population is 5,000, of which one-third are native Californians and Spaniards. The city is located on the beautiful bay upon which it takes its name, and is a very attractive city, viewed from any point of observation. We first saw it from the decks of the steamer Orizaba, and the sight was charming. The Santa Barbara channel, smooth as an inland lake, is entered after Point Conception is passed, and after a sail of three or four hours, beautiful Santa Barbara is reached. The city is tastefully laid out, and all the streets and approaches are in keeping with the general neatness of the place. The main street commences at the steamship wharf, and the grade rises enough to insure good drainage. At the end of the street is situated the famous Arlington hotel. Upon this street is the only line of cars which connect the Arlington and the wharf, passing by the College hotel and the numerous, beautiful and tastefully kept stores, that find a ready appreciation by the residents and many tourists who frequent the city. The other approaches to the city are, by the Pacific Coast Stage Co.'s stages, that come over the Gavito mountains from San Luis Obispo, El Paso de Robles and Soledad; the railroad to Newhall, thence by Allman's stage line via San Buenaventura, the famous Carpenteria valley, and the coast line of the county, affording a romantic and picturesque trip. We have traveled over them, and find one as interesting as the other, and all worthy of patronage by the traveling public. It is in Santa Barbara where those in search of health and pleasure congregate in great numbers from all parts of the Union. There is hardly a town in the United States that has so large a proportion of educated and refined people who have the reputation of being extremely hospitable. There is a free reading room and a large circulating library, a glass ball shooting club, archery club, etc. Besides the public schools, there is a well-conducted college. Near the town are hot sulphur springs with good hotel accommodations. These springs are much frequented by those suffering from rheumatism and pulmonary diseases.

The city contains a fine theatre, and many brick public buildings, consisting of a city hall, court house and public school buildings. There are two newspapers, which do much to forward the interests of the city and county. These papers are well edited by intelligent and agreeable gentlemen, and deserve a liberal patronage.

## Hotels.

The principal hotel in Santa Barbara is the Arlington; and deservedly so, as it is the best appointed hotel outside of San Francisco. It was designed and built with the idea of first-class patronage. The beautiful building occupies a square of five acres of ground, newly laid out in lawns, flower-arbors and drives.

The Occidental is a three-story building, opened in 1882, and has forty rooms which are light and



ary. This hotel is the headquarters for commercial travelers.

The Murray house, kept by Mr. James Swift, is well appointed, and the attendants all that could be desired.

#### Boarding and Restaurants.

Mr. Geo. Dagdale keeps a cosy, home-like boarding house, and a similar house is under the efficient supervision of Mrs. G. H. Liddings.

The Central restaurant, and one kept by Mr. T. H. Rosenberg, are both well deserving of the patronage they enjoy.

#### Business Houses.

Crane's bookstore contains stationery, muslin, fancy goods, artists' materials, etc. Mr. Crane is agent for automatic school seats and desks, Roger's stationery, etc. This store has been established since 1877, and employs three men; during the holidays ten are in attendance. The stock is the largest in the city, and the store building is 20x100 feet in size.

C. C. Hunt & Co., established in 1870, are the largest dealers in the United States in Lima beans, as 2,000 tons are handled by them yearly. The firm is located at the corner of State and Ortega streets, and deal also in choice family groceries, provisions, glass, wood and willow ware.

Smith & Johnston also transact a large grocery business.

The fine drug store of Mr. Edmondson contains many articles necessary, even in this healthful climate. Roth's squirrel poison ("Sure Death") is for sale.

H. C. Ford is an artist of considerable merit, and has a fine collection of pictures.

Mr. Woodbridge is spoken of as being a careful, honorable real estate agent, who does all in his power to satisfy those who deal with him.

G. B. Pendola and G. B. Parma have large liquor establishments, and keep on hand domestic wines, etc.

Mr. Walcott is an energetic and successful hardware dealer, as are also Roides & Glt.

Mr. Perkins has charge of considerable of Col. Hollister's property, which he desires to sell in smaller farms. Mr. Perkins is a wide awake, intelligent man, and quite successful in the land business.

Large interests are often carried on in a quiet way; an example of which is the abalone export. There are forty tons of abalone meat or, as it is called, Chinese oysters, shipped annually to San Francisco and sold for \$20 per ton. This meat is prized as a great delicacy by the Chinese who pay five cents a pound for it in San Francisco.

#### The Beach.

This part of Santa Barbara is quite popular at all seasons of the year, as there is most enjoyable bathing here, there being no surf, and the water is always warm and refreshing.

#### El Montecito

Is properly a part of Santa Barbara, though lying eastward in a valley reaching to the foothills. In this little valley Col. Dismore has experimented with the banana, and proved it a grand success. Water is abundant throughout the valley, and lands are cheap here at prices named. All semi-tropical fruits thrive well and are remunerative.

#### Islands.

Three of the channel islands are assessed to one company, and are largely devoted to wool growing, as are all the islands along the coast. The surface is rugged and grazing good. Small schooners are the means of communication between them and Santa Barbara.

#### Lighthouses.

There are two of these on the coast, the one at Point Conception being a brilliant Fresnel revolving light, flashing a white light every half minute. The other is near Santa Barbara.

Much more might be written of this beautiful and fertile country, but farther notice must be postponed to some future time.

#### COUNT PULASKI.

Count Casimir Pulaski, a Polish soldier, born in Lithuania, March 16th, 1747, died from a wound received in the attack on Savannah, Oct. 11, 1779. He was the son of a Polish nobleman, the starosta of Wareck, who was the chief organizer of the confederation of Bar, which was signed by his three sons (1768). Casimir, who had acquired military experience in the service of Duke Charles of Courland, entered heartily into the war for the liberation of his country. Forced to cross the Danube, he took refuge after the storming of Bar in the monastery of Berdichev with three hundred men, and after sustaining a siege of several weeks capitulated on the condition that the garrison should be set at liberty. He himself was not

freed until he had pledged himself to bear proposals for a reconciliation to the chiefs of the confederates; but as soon as he was set at liberty he refused to keep a promise extorted by force. Joining his father in Moldavia, he made incursions across the Danube, and attacked the Russians and fortified posts within the Polish borders. He carried on a desultory warfare in various parts of the country, until an unsuccessful attempt to gain

and prisoners, he himself escaping with difficulty to the American lines. In September the French under Count d'Estaing and the Americans prepared to besiege Savannah. On Oct. 9, it was determined to carry the town by assault. Pulaski was placed at the head of the French and American cavalry, and during the engagement received a mortal wound. He was taken on board the brig Wasp, which lay in the Savannah river, died after lingering two days, and was buried in the



PULASKI MONUMENT—CHRIST CHURCH, SAVANNAH.

son should be set at liberty. He himself was not freed until he had pledged himself to bear proposals for a reconciliation to the chiefs of the confederates; but as soon as he was set at liberty he refused to keep a promise extorted by force. Joining his father in Moldavia, he made incursions across the Danube, and attacked the Russians and fortified posts within the Polish borders. He carried on a desultory warfare in various parts of the country, until an unsuccessful attempt to gain



CALIFORNIA HORNED TOAD.

possession of the person of King Stanislas Augustus, in 1771, closed a sentence of outlawry and death to be passed against him, on the ground that it was his intention to assassinate the monarch. The coalition of Austria, Russia, and Prussia for the conquest and division of Poland was soon after completed, and resistance became hopeless. Pulaski, who had lost his father and brothers in the war, made his way to Turkey, and afterward went to France, where he offered his services in the American cause to Franklin. With high recommendations to Washington he arrived at Philadelphia in the summer of 1777. He at first served in the army as a volunteer, but four days after the battle of Brandywine, in which he dis-

tinguished himself, he was appointed by Congress commander of the cavalry with the rank of Brigadier General. After five months he resigned his command, and entered the main army at Valley Forge in March, 1778, where he proposed to organize an independent corps of cavalry and light infantry, to which Congress assented. By October three hundred and thirty men were in this corps, which was called Pulaski's Legion. With this he marched, in February, 1779, to South Carolina, reached Charleston May 8, and vigorously opposed the project of surrendering the place to the British army then before the city. On May 11, he attacked with his legion the British advance guard, and was repulsed with considerable loss in killed, wounded,

#### THE CALIFORNIA HORNED TOAD.

This little fellow is harmless; and the Indians catch and use them as an antidote for rheumatism, taking the toad by the tail and gently tapping the parts affected; their spiny covering creating on the surface of the skin a counter-irritant, said to be quite efficacious for the Indian.

Subscribe for THE RESOURCES OF CALIFORNIA.

#### ESTABLISHMENT OF THE FIRST COTTON FACTORY IN THE STATE.

A writer in the Morning Call furnishes that paper with the following concerning this new enterprise:

The absolute need of manufactures, to properly develop the resources of the State, is a matter that has been the theme of many an article in the newspapers of the State; yet, while the conclusions arrived at have invariably been admitted, only in a few instances have they been acted upon. Every manufactory established has been the cause for congratulation, and especially has this been the case where the enterprise has been the first of the kind inaugurated here. A short time since, the virtual incorporation of the California Cotton Mills Company were filed with the Secretary of State. The objects of the company are to spin and weave cotton and to manufacture the usual articles made in cotton mills. The capital stock is \$200,000. The board of directors is composed of the following: George W. Beaver, John Center, S. W. Rosenstock, L. Dinkelspiel, Captain J. C. Albrecht, E. C. Sessions, V. D. Moody, A. Chisholm and W. E. Miller. That the new enterprise is one of grand promise is amply exemplified by the high character and financial standing of the members of the directory. The factory will be located at Oakland. The tract transferred comprises five acres, situated on the line of the local railroad, 360 feet westerly from Park avenue station, and rising about midway between Park avenue and the basin upon the estuary. The company have also acquired one acre upon the water front adjoining the mill site.

George W. Beaver has been chosen president of the board of directors. In a long conversation with him, in regard to the enterprise, the following particulars were obtained. The company are delighted with the site they have secured for the location of the mills, which was partly acquired by donation and partly by purchase. Several other liberal propositions for sites were made by other citizens of Oakland, but the board of directors, after carefully considering all the points essential to the success of this enterprise, deemed the one selected to be most available for their purposes. At the site selected, the company will have equal facilities for shipping either by water or rail. As Mr. Beaver remarked, the company could not have secured a better location if they had gone out with \$15,000 in twenty dollar pieces than this which has been procured at an entire outlay of \$3,500. The machinery will be ordered at once. The motive power, and such other machinery as can be, will be made here, but the looms and spinning machinery will be imported from Europe. As it will take several months for the machinery to arrive from Europe, work on the buildings will not be commenced immediately, but they will be ready for the machinery when it does arrive.

The company will receive its supply of cotton primarily from Texas, which produces one-sixth of the cotton crop of the United States. There is cotton grown, to some extent, in this State. Messrs. Huggins and Tevis have between 200 and 300 acres in cotton on their property in Tulare county, and Mrs. Strong, widow of Colonel Strong, the original cotton raiser of the State, has grown 130 bales of cotton on her ranch, near Merced. The establishment of the cotton mills will attract more attention to the growing of cotton here. There is also considerable cotton grown in Mexico, and quite a quantity comes here annually from Tamaulipas and the South Sea Islands, which can be made available. Texas, however, will furnish the bulk of the raw material for the mills, and as that State is but half-way east, and as there is a material difference in the freight on raw and manufactured goods in favor of the former, the prospects are certainly good.

The gentleman who has been secured by the company as its manager, has had twenty-one years experience in the business in Scotland, is a thorough mechanic and a practical man. About 150 hands will be employed when the mills are in running order, and none but white labor will be employed, the major portion of which will be girls.

While the projectors admit that they labor under the disadvantage of having to consume some time to train their labor, yet they have no doubt of the ultimate success of the enterprise.

#### SILVER, ONLY A MONTH.

To show what San Bernardino is doing in this line, we will refer to a statement made by Lieutenant Governor Daggett while paying this office a visit a few days ago. He stated that the bullion clerk of the Bank of California, I. P. Allen Esq., told him that the yield of silver bullion from this county for the past month was over \$300,000, greater than the yield reported from the State of Nevada during the same time. This speaks encouragingly for our mining industry. As the amount of bullion is on the increase, and as only a few of our mines are just beginning to be developed, we can reasonably look forward with confidence to a yield of twice that amount of bullion per month before many months shall pass.—*Calico Print.*

## FRUIT TREES!

Apple, Pear, Peach,  
Plum, Apricot, Etc.

Root GRAFTS,  
Seedlings, Cuttings,  
Seeds, Etc.

## LARGEST STOCK IN AMERICA!

Send for list of what  
you want and we will  
quote you a price for  
the same, boxed and  
freight prepaid to  
any of the principal  
railroad towns in Cal-  
ifornia, Oregon, and  
Washington Territory.

If you do not want anything this year send for  
Price List and get posted for another season.  
**E. MOODY & SONS, LOCKPORT, N.Y.**  
Nursery Nurseries, Established 1839.



## THE RESOURCES OF CALIFORNIA.

JOHN P. H. WENTWORTH.

EDITOR AND PROPRIETOR.

PUBLICATION OFFICE:

No. 320 Sansome St., Bullock Building.

ISSUED MONTHLY

Terms ..... \$2 per Annum.

SAN FRANCISCO.....DECEMBER, 1883

## READ AND CIRCULATE.

When you have read this paper preserve it and lend it to your neighbors, or send it to some friend in the Eastern, Western, Southern States, Canada, England and Continental Europe, who will value the information it contains, and might be likely to come or send intelligent, industrious farmers to settle in California.

## TABLE OF CONTENTS:

First Page.—Los Angeles County.  
 Second Page.—Los Angeles County, Continued.  
 Third Page.—Los Angeles County, Continued—Growing Walnuts.  
 Fourth Page.—Ventura County.  
 Fifth Page.—Ventura County, Continued.  
 Sixth Page.—Santa Barbara County.  
 Seventh Page.—Santa Barbara County Continued.—Count Pilsbry.—Establishment of The First Cotton Factory in the State.  
 Eighth Page.—The Silent River.—Dolores and Other Poems.—Obituary—Some of California Staple Products.—California Cheese.—Coming to Stay.  
 Ninth Page.—Fruit Growing in California—California's Progress.—Wine Making—Cotton Growing—Horsefod Cattle.  
 Tenth Page.—Dairying and Hog Raising in Southern California.—Timothy County Products.  
 Eleventh Page.—The Santa Cruz Mountains—Grafting on Almond Trees—Small Things on a Farm.—Wine Making.  
 Twelfth Page.—Our Milling Industry.—The Lumber of the Pacific—Valuable Land—Orchard and Vineyard.  
 Thirteenth Page.—Signs of the Times—Oil Developments—California As It Is—A Remarkable Mine.  
 Fourteenth Page.—The Mining Industry of California—Governor Stanford's Vineyard.  
 Fifteenth Page.—Sailing Some Slander—Our Timber Lands—Demigration to California—Imported Fruits.  
 Sixteenth Page.—From Europe to California—Olive Culture.—The Future of California—Silk Culture.

## THE SILENT RIVER.

BY J. P. H. WENTWORTH

The river, upon either side, overspread almost to its center with the graceful foliage that luxuriates there all the seasons through, as it quietly moves along on its meandering way, disturbed only now and then by the fish that leaps from its hiding-place to bask, for a moment, in the rays of the morning sun, reminds one of the peaceful, quiet life of him who has never consented to become the slave of society and imaginary want. The river, upon whose bosom it is pleasant to paddle the Indian canoe, stopping only to pluck the rich perfume of lily for some loved beauty—it may be the dusky maiden of the forest—or some beautiful creature of that other race, equally natural in form and mind, an escape from society, one who has walked with nature and God, never once forgetting how sweet it is to be natural in all things, ever calls to mind the beauty there is in quiet retirement. Glide on beautiful river, and may the sweetness of your song charm others as it did me, when, silently, in the birchen canoe, I drifted with you, humming and hoping that no rude materialist would ever be permitted to disturb the melody of your song that so completely lulled the cares and anxieties of noisy business life and the hubbub of society.

## DOLORES AND OTHER POEMS.

We have received from the publishers, Messrs. A. L. Buerck & Co., 721 Market street, the above named work. It is a book of 536 pages, neatly printed and handsomely bound, containing the poems of ALBERT F. KRECHVAL. The volume also contains several pages of poems by his gifted daughter, MISS ROSALIE W. KRECHVAL. The author, ALBERT F. KRECHVAL, dedicates the work thus gracefully: "To the grand army of California Pioneers, the great 'silent majority' gone before, and the fast dwindling remnant soon to follow, this volume is most reverently and affectionately dedicated by their comrade, the author."

Every pioneer in California ought to secure a copy, for in it will be found many poems descriptive of scenes familiar to him. We place the author of these poems ahead of any of the California poets, which is awarding a high word of praise.

## OBITUARY.

HATCH.—Died in Oakland, November 22nd, suddenly, Mrs. Minnie Wentworth Hatch, wife of Frederick A. Hatch, aged 21 years.

The above announcement came to many hearts, both in this city and Oakland, with a suddenness that was shocking. The day before her prostration was passed with her family in San Francisco. On this occasion she was very cheerful and happy. In less than forty-eight hours thereafter she lay pallid in the cold embrace of death. Minnie possessed a well nurtured, womanly mind for one of her tender years. She was kindly alive to all the responsibilities of a useful Christian life, and felt a pride in the maternal relations she soon would have assumed. She was cheerful and happy in disposition, and made sunshine for all around her. The kind-hearted, grief-stricken husband has the warm sympathy of a large circle of relatives and friends.

The following we copy from the *Oakland Daily Times*:

## MRS. MINNIE WENTWORTH HATCH.

A Large Attendance at Her Funeral Yesterday.

The funeral of Mrs. Minnie Wentworth Hatch, wife of Frederick A. Hatch, of 1064 Fourteenth street, and a commission merchant doing business in San Francisco, took place at the First Baptist Church in this city yesterday. There was an informal service at the residence, and the ceremony at the church was of a very elaborate character.

There was hardly a vacant seat in the church at two o'clock, the hour when the exercises began. The casket containing the remains was borne in by six pall-bearers and deposited in front of the pulpit. The casket was covered with white satin and upon it were rich and fitting floral designs. The pulpit was profusely and tastefully decorated with flowers, smilax and ivy, and smilax depended in graceful loops from the choir gallery. Japaneas, violets, pansies, marguerites and carnations were noticed among the flowers composing the stars, crosses, wreaths, broken columns, pillows and other devices with which the whole front of the pulpit was adorned. The pew usually occupied by the deceased and her family was vacant; it was bordered with intertwining lines of black and white crape, and woven in with this border of crape were flowers favored by the departed—such as white roses and smilax.

The services were conducted by Rev. E. H. Gray, pastor of the church, assisted by Rev. W. C. Pond, pastor of the Mission Congregational Church, San Francisco. The deceased had been a member of Mr. Pond's church. The regular choir of the church was superadded for the occasion by a quartette, who sang beautiful and timely selections with exceeding feeling and expression, composed of Mrs. George W. Wright, soprano; Miss Allen, alto; C. E. Lloyd, tenor; and George F. Winstell, bass.

Mr. Gray, the pastor, preached a very pathetic and touching sermon. During his discourse he referred frequently to the Bible of the deceased which he held in his hand and in which were many passages she had marked. He was followed by Mr. Pond, who testified how sincerely his congregation deplored her untimely death. After prayer, Pastor Gray announced that all present would now have an opportunity to view the remains, a permission which almost the entire great throng availed themselves of. Succeeding the last gaze, undertaker Hamilton affixed the lid and the remains were transferred to the hearse by the pall-bearers: J. H. Pond, C. R. Ford, W. Johnston, E. F. Crossell, of San Francisco, and L. S. Borchard and Frank Adams, of Oakland.

Deceased was but twenty-one years of age, and notably beautiful. Last Wednesday night she was suddenly taken with internal hemorrhage and died next morning. She was the daughter of J. P. H. Wentworth, of San Francisco, editor of the *Resources of California*. Among the many friends and relatives present at the funeral was her brother, Samuel A. Wentworth, ticket agent at El Paso, Texas.

The remains were temporarily deposited in the receiving vault at Mount View Cemetery.

## QUARTZ GOLD.

The *Sanora Democrat* says: Some exceedingly rich rock, so report says, is being extracted from the Patterson mine. The quartz is said to be fairly alive with free gold.

## SOME OF CALIFORNIA'S STAPLE PRODUCTS.

In agriculture permits our chief reliance has been on wheat; and it will, without doubt, continue to be our principal staple, though a more diversified system of culture is beginning to prevail, more and more, to the great advantage not only of the farmers themselves, but also of the general interests of the State. The area of land under wheat culture, during the past season, is estimated to have been about three and a half million acres the yield of which we assume to be not less than from fifty to sixty million bushels. Of this quantity, fully three-fourths will be exported, furnishing an amount of freight sufficient to load several hundred first-class ships. Assuming prices to average those received for last year's crop, the value of the late harvest will not fall much short of \$50,000,000. Our natural advantages are such that, notwithstanding the great distance from the principal wheat markets, California can compete, successfully, with Russia and the Atlantic States. A larger area of land is every year being planted with a variety of small grain. The annual crop of barley amounts to from 15,000,000 to 18,000,000 bushels, and of oats to about one-fifth of that quantity, with more or less rye, buckwheat and Indian corn.

In considering the interesting and instructive history of the rise and progress of the different industries of this State there is no part of it more so than the record of the product and export of the cereals. Less than a third of a century ago the vast plains of this State were regarded as worthless, except for pasturage for sheep, cattle and horses. These lands were then claimed and possessed by a pastoral people who managed to get a very poor living from possessions that spread out as far as the eye could see. The idea that these plains were then, or would ever be, of any value for wheat, barley, oats, or any other grain, had not entered the mind of man. To-day, they are the heat wheat-producing sections in the world. A third of a century ago, the eyes of the world were turned towards California to see the stream of yellow gold that was then flowing out of the Golden Gate in payment for breadstuffs that were then coming in return. To-day, the thing is entirely reversed. Notwithstanding that we are still among the largest producers of that gold, we are, at the same time, producing and shipping out of the Golden Gate a larger amount of golden wheat than is produced and shipped from any other State in the Union, and, in return for it, we are shipping in the very gold that our mines have produced, but it comes in the shape of English sovereigns.

Our wool interest has become one of great value. The clip of the year just closing is estimated at about 40,000,000 pounds, and its value will probably amount to from \$8,000,000 to \$10,000,000. Judging from present indications our products, in a few years, will include cotton and silk, experiments in the cultivation of these staples having, thus far, been attended with encouraging results. Our wine interest is increasing in growth and value year by year; and from this industry California will reap an immense amount of wealth in the future. This year's production is estimated at 15,000,000 gallons; a large amount of brandy also has been distilled from grapes. For fruit growing, no part of the world has such advantages as California, the variety of soil and climate in the different sections being suitable for all the choice varieties. Hitherto the great bulk of this crop has been allowed to rot and run to waste, but with the establishment of fruit canning factories this loss can, in the future, be entirely avoided, and horticulture be made a great and profitable industry.

## SWEDISH DAIRIES.

As there are a number of dairies conducted under the Swedish system now in operation in Sonoma, Marin and other counties, we give the following plan as related by an experienced Swedish dairymaid: The milk is set to collect the cream in tin cans twenty inches deep, and holding about five gallons each. The cans are not set on shelves, but in large vat-like receptacles through which cold spring water is kept constantly running, the cans being sunk in water to the top of the milk; thus keeping the temperature low and perfectly uniform. This system has of late been adopted in many of the best dairies in the State of New York.

## CALIFORNIA CHEESE.

In our State, where there are greater advantages and facilities for manufacturing cheese than can be found elsewhere in the world, it is difficult to understand why there is not, at least, enough made for home consumption. Right here let us remark, parenthetically, that the sooner our people drop their prejudices against home manufactured goods the better it will be for the welfare of the country. It has been demonstrated, time and again, that almost every article which is imported can be raised or manufactured at home. In regard to cheese, notwithstanding it is a well known fact that a better article can be made here than in any other part of the Union, eastern manufacturers ship considerable to this State. Our cheese makers have this competition to contend against, and the result is seen in the accumulation of stock. Cheese is almost as low in price as butcher's meat; and although it is known to be far more nutritious, it is not as common an article of food here as it is in many other countries. It is our duty as good citizens of California to use all honorable means to discourage the importation of cheese. It is had economy to send thousands of dollars out of the State for such articles as we can and do produce at home. It has been very pertinently asked, why we do not try to create a foreign demand for it? We think the suggestion is a good one. In Great Britain, the amount of cheese, annually produced, according to competent authority, is about 350,000,000 pounds, against a consumption of nearly 600,000,000 pounds. The State of New York alone exports, annually nearly 140,000,000 pounds. California cheese is fit to be exposed for sale in any of the markets of the world. Place samples of it on exhibition, in any of the markets of the old world and we believe but a little time would elapse before a large demand would be made for it, as there generally is for everything sent from this State. The value of cheese as food is not fully appreciated in the United States. It has been stated that a chemical analysis shows cheese to be rich in fats and much richer in flesh forming matter than flesh itself, which is largely water. And yet a pound of cheese seldom brings more than a pound of meat, although chemistry gives the former the preference as a nutritious food article by nearly two to one. In the United States the annual consumption of cheese, per capita, is only about five pounds. In Great Britain it is more than double.

## COMING TO STAY.

One of the evidences going to show the future prosperity of the State, is the fact that those who have homes here propose to stay. The almost invariable observation of those who have made visits from this, the State of their adoption, to the their early homes on the other side of the mountains is, that "they never want to go back there to live." California is no longer regarded merely as a good place to come to for the purpose of making a speedy fortune to be spent and enjoyed elsewhere, but it is rightly looked upon as the most delightful and desirable place for a home. The thousands who are now flocking here come to stay. Those who have means set themselves at work to establish homes. Those who come without means look forward to the time when they can own a house and a few acres of land. The effect of this influx of home seekers will be to break up large land tracts, and cause a more thorough cultivation of the soil and the development of the varied resources of the State.

As the interior papers are generally calling upon the journals of San Francisco and Sacramento cities to direct the incoming tide of immigrants where to settle, we will state that there are counties in every section of the State containing thousands of acres of public lands, rich in soil, well timbered, abundantly watered and a climate that can not be surpassed on the continent. One special attraction of California is, that its climate is so mild that cheap homes are comfortable in winter, and in summer people can live comfortably almost anywhere, both day and night, if they should like the owner of two or three blankets. We have a grand State, with wonderful resources and room enough for all of the thousands who are coming to it. In the language of a Sir Knight, who recently visited us: "It is a marvel that more Eastern people, who have the means, do not come to California and take up their permanent abode."



## FRUIT GROWING IN CALIFORNIA.

From insignificant beginnings the growing of fruit in this State has assumed the importance of a leading industry. The early pioneers will remember the avidity with which they pounced upon the few apples or pears that, in the "winter of Forty-nine and spring of Fifty," found their way to this market from Oregon. There was no haggling about prices in those palmy days, when coin was scarce and gold-dust was the circulating medium, and the fortunate possessor of a consignment of fruit found no difficulty in disposing of his stock at any price he chose to name. The few grapes grown at the different missions served only to whet the appetites of the gold seekers for the fruits to which they had been accustomed in the "States," and apples and pears from Oregon, bananas, oranges, limes and melons from Panama, Mexico, Tahiti and Hawaii, found a ready sale at phenomenal prices. For several years no attempt was made, of any importance, to cultivate fruit-trees in this State; the minds and energies of the people were directed to the all-absorbing pursuit of gold-gathering; they were oblivious to the fact that, in orchards of golden fruit, lay hidden a mine of wealth far richer and more certainly productive than any which mother earth concealed in her bosom.

Quick returns and large profits was the motto of the times, and even when the attention of a portion of the people was turned to the cultivation of the soil, but little thought was given to fruit-culture, as grain and vegetables yielded a prompt return upon the capital invested in raising them, while the cultivation of fruit trees required years of patient labor before any profit could be realized from that branch of industry.

Some there were, however, who had sufficient sagacity to look beyond the cupidity of the hour and plant orchards of various fruit-trees, more as an experiment at first than with any idea of profit to be derived from them. It was soon discovered, however, that the soil of California was peculiarly adapted to fruit culture. The trees already planted grew with astonishing rapidity and vigor, and bore fruit at a much earlier age and in greater profusion than in the Eastern States. Seeing the success of the pioneers in this enterprise, others entered the field until soon every rancho had its incipient orchard. Many, unskilled in fruit culture, paid very little attention to the quality of the trees planted, and, as a consequence, the market, in a few years, became flooded with inferior fruit. No railroads existed in those days by which the surplus could be shipped to an Eastern market, and fruit drying and canning, as at present practiced, were unknown arts. Hundreds of bushels of fruit were fed to hogs or allowed to rot upon the ground; the farmers became disgusted, and many of them cut down their orchards for firewood, and sowed the land to grain or planted it with vines. Others, however, learning wisdom from experience, went scientifically to work, and, by a judicious system of grafting and budding upon the vigorous native stocks, of well known and standard varieties, the most gratifying results were realized. The completion of the railroad across the continent opened a new field of enterprise for our orchardists, and the system of canning and drying fruit, since adopted, has reduced the loss on crops to a minimum figure, and enables the intelligent grower to utilize a large amount of bruised or inferior fruit which, in the absence of these adjuncts, would be utterly worthless. What is now needed, in order to make this industry permanent and remunerative, is intelligent and united action on the part of fruit-growers, in experimenting as to the best and most profitable methods of culture, the finest qualities of fruit to be raised, methods of planting, grafting and budding, of drying, canning and preserving, cost of production, transportation, etc. Another important field of experiment is, as to the means of exterminating the many frugivorous insects so destructive to orchards.

A step in the right direction has been taken by the Fruit-Growers' Convention which assembled in this city on the 20th ult, and was composed of delegates from all parts of the State. Steps were taken to form a State Association, to be called "The Fruit Growers' Association of the State of California"; having for its object the collection of reliable information relative to the condition and value of the fruit crop in this and other countries,

and to protect the interests of its members. An executive committee was appointed, consisting of A. T. Hatch, Wm. Johnston, L. W. Buck, W. H. Aiken, F. O. De Long, A. Block, and W. H. Jessup, and this committee was invested with full power to carry out the objects of the association and to prepare rules and regulations for its government. The fee for membership is fixed at \$10.00, and each member is required to contribute such information relative to the subject of fruit-growing in his locality and elsewhere as he may be able to give.

The association will again assemble on the first Tuesday of March, 1884, when it is hoped a permanent organization will be effected. Considerable valuable information was elicited from various delegates on matters of vital importance to the orchardist: as per example; the best stocks upon which to graft various kinds of fruits; the importance of preserving orchards of standard fruits; fruit pests; orchard canning etc. The "free box" question was freely discussed; the convention being nearly unanimous in the opinion that this system should be adopted, as the boxes when returned were often infected with pest germs, and the spread of the codlin moth and other fruit-destroyers was often attributable to this source. Dealers will also pay better prices for fruit when packed in fresh, new, clean boxes, than when put up in old, worn and soiled ones, no matter what the quality of the fruit may be. The committee on the professorship of entomology in the State University, was continued, and the thanks of the convention were voted to Professor Matthew Cooke. The convention was in session three days, and adjourned to meet in San Francisco, in 1884, at a time to be fixed by a committee of the State Board of Horticulture.

We shall be pleased to publish, at any time, communications from fruit-growers relative to this branch of industry.

## CALIFORNIA'S PROGRESS.

Probably no other State in the Union enjoys an equal share of general prosperity. The rapid growth of California in wealth, population and refinement is a matter which should be gratifying to every citizen. Whatever may befall any private enterprise, or affect adversely the temporary interest of any particular locality, we shall always have the consolation of knowing that others are prospering. Here, we see towns and counties, from Siskiyou to San Diego, all filling up, and property in them rapidly increasing in value. Within this area almost everything known to the vegetable kingdom will grow and attain maturity. Between the ocean's beach and the summit of the Sierras almost every metal known to the mineral kingdom is found. What then, may be asked, should be the future of a country so favored? In the language of another "a country with such vast resources as California possesses, should be the paradise of earth and its people ought to enjoy the highest degree of happiness vouchsafed to mortals." Perhaps no country in the world has within itself more of the necessities and luxuries of life than California. A distinguished writer recently said, in an article in one of our contemporaries: "if there was an insurmountable barrier thrown around our State we should not want for meat, drink and wearing apparel. If compelled to do so, we could draw on our own resources not only for our staples, but the luxuries of life." Said he "some day we shall learn to wear our own flannels and silks, eat our own fruit and vegetables, and drink wine pressed from our own vineyards; and when we have done this we shall not send the gold of our mines abroad at the rate of thirty to forty millions per year." The future of California is a pleasing theme to dwell upon. Turn the subject as we may, it has no dark repelling side.

## A HOME MARKET.

The Yreka Journal states that fruit of all kinds raised in that section the past season found ready sale, and that orchards and vineyards are receiving more attention than formerly. The prospects of selling fruit raised next year look very promising. It thinks that when the railroad shall be finished to that county, Siskiyou fruit will attain a high reputation abroad, and be in demand as first class, especially apples and the hardy fruits which grow to better perfection in a cool climate.

## WINE MAKING.

There is no doubt that the wine making interest of this State has received a greater impetus during the past two years than any other industry. The editor of the Chronicle, of this city, is informed by one of the most intelligent wine growers of California that within twenty years it will be greater in many of the agricultural counties and occupy the attention of more people than wheat growing. This, we believe, is the general opinion in all parts of the State. California wines are rapidly becoming known, and it is the opinion of good judges that the demand for them will increase from year to year. It is highly gratifying to learn that the wine growers have a fair prospect of being well paid for their energy and patience in waiting so long for a paying market. Our grape crop for the current year has been very large and of fine quality. We believe that vineyards will steadily increase in value and become one of the best paying industries in the State. There are millions of acres of cheap lands which can be successfully transformed into vineyards. This industry has not attained its present prominence without encountering many obstacles and difficulties. Our wines have, within the last year or two, received many acknowledgments of their merits. Several prominent wine companies have been engaged for years in developing the quality and spreading abroad the merits of California wines, for which they are justly entitled to a large meed of praise. It is said that California has vineicultural land enough to make as much wine as France, Germany, Hungary, and Spain combined can produce; and there is no doubt, among those who have given the subject the closest study, that she will at some future time out rank every other wine making region in the world. Our foot hills, which are held at less than one tenth the price of land in France, have a vast productive capacity, and seldom fail to yield large crops of every variety, but they are specially adapted to the growth of grapes. As the State increases in population and transportation facilities, so will the culture of fine grapes and the manufacture of wine become more important and remunerative.

## COTTON GROWING.

Concerning the production of cotton in Tulare Valley, the Bakersfield Californian, of recent date, has the following remarks:

Cotton growing here has long since passed beyond the domain of experiment. A considerable number of bales have been among our exports for several years past, and will continue to be as usual this year. It may be planted here the beginning of April. Picking commences the last of August or the beginning of September, and may be continued until Christmas. The staple is a snowy white as there are no rains or heavy dew to stain it. We have very few here who are acquainted with the crop, or no doubt it would be grown quite extensively, as it is easier managed, with perhaps the exception of picking, than in the Southern States. It can be raised to greater advantage and profit by poor men, as all the operations, up to ginning and baling, are conducted by horse and handpower, and in the nature of things always will be. Since the war innumerable poor men in the South have become very prosperous through the labor of themselves and families in cotton growing. The establishment of these mills will no doubt be the means of stimulating this branch of production here. Through inducements that will be held out by means of this enterprise, many cotton-growers will come among us. All the cotton grown here, thus far, has been purchased by the woolen mills of this State and Oregon at remunerative prices.

## CHEAP LAND.

The papers of Humbolt, Trinity, Siskiyou and other counties in the northern section of California state that land can be purchased in their neighborhoods at reasonable prices and on easy terms. They also remark that there are large areas of land belonging to the Government still open for settlement.

## COLONIES.

The progress that the Southern California colonies are making is extraordinary; they are filling up fast and those who build and enter upon permanent occupation seem so well pleased with their selection that they induce their old neighbors and friends in the Eastern States to follow them.—Cor. S. F. Merchant.

## HEREFORD CATTLE.

We commend the following communication to the careful consideration of our California stock breeders. The writer is evidently thoroughly conversant with his subject, and his suggestions are worthy of attention:

SAN FRANCISCO, CAL., Dec. 2d, 1883.

EDITOR RESOURCES OF CALIFORNIA: I take pleasure in informing you of my successful trip to New Zealand and return. I have brought back twenty selected Hereford bulls, ten to twenty-six months old; eighteen selected Hereford cows, twenty-four to thirty months old; ten selected Leicester sheep, two teeth; ten Lincoln sheep, two teeth.

New Zealand is reached from England in forty days via Suez canal, and while there I saw the steamship Doric loading, in refrigerators, four thousand carcasses of Hereford beef and ten thousand carcasses mutton. The beef was mostly high-grade Hereford, and the ages of those killed was from three to four years. The dressed carcasses weighed from eight hundred to twelve hundred pounds cold meat, and the sheep over eighty-five pounds per carcass. There can be no doubt but that as a grazer and beef producer the Hereford is the breed over all. They are always red with white faces, and guaranteed always to produce a white faced calf, no matter what breed or color the cow. Their meat is marbled and they excel in loin, rump, brisket and chine, and you can cut round steaks clear to the hock. They are very hardy and splendid travelers, also easy fatteners. They are low to the ground, small bone and all meat, and shrink less from live weight than any other breed of cattle. In size, they are as large (to dress) as the short horn, and will keep fat where a short horn will starve. There is no doubt but they are aboriginal, and when we notice the stock increase from using the Herefords, we can not help but think so. As prize winners at various fat stock shows, both in England and America, they have invariably taken the palm; and at the Smithfield show in England, now over one hundred years old, they have regularly taken more than two-thirds of the prizes, and more than all other breeds together. In the Mississippi valley there are to-day a great many of these cattle, and parties are importing them from England at fabulous prices; while in Colorado and Wyoming hundreds and hundreds of high-grade Hereford bulls are being put in with the beef stock of the country.

A five-year old Hereford bull at \$600 is a cheap investment, as the grade bull calves he would get in one season, would be readily picked up to turn loose on the range. Much credit is due to our Pacific Coast people for making direct importations from the Colonies, as the English breeders have five farms in New Zealand. Mr. Rowlandson, in a prize report, gives an interesting extract from history, showing that in the tenth century a celebrated breed of red cattle with white faces prevailed in Wales, of which, that part of the county of Hereford on the north side of the river Wye, formed a portion. He tells us that HOWELL the Good fixed the compensation to be paid for injuries done by one of the princes towards another, at one hundred red cows with white faces, and a bull of the same color. Speed records that Maud de Brehos, in order to appease King John, who was highly incensed against her husband, made a present to the queen of four hundred cows and one bull from Breckmoorshire, all red with white faces.

A Weberville (Maine) newspaper says: "Mr. Libby showed a handsome grade Hereford on the street, four years old, that girted eight feet and weighed one thousand seven hundred and ten pounds, and the meat, after hanging two days, weighed one thousand one hundred and seventy-six pounds, and delighted the eyes of epicures;" and Mr. Campbell, in Kansas, who showed a grade Hereford heifer at the fair, had this card on her stall:

I was born Aug. 19th, '82, and named  
TEXAS JANE

"My father was a Hereford thoroughbred.  
My mother a wild Texas scrub.  
The cross makes me easily fed,  
And I am able to rustle for grub.  
Don't stare at my meat on my back,  
Or be surprised at my snow white face,  
For 'tis all the work of papa  
That gives me this Hereford grace."

Yours Faithfully,  
ROLLIN P. SAGE.

## ORANGES.

Buyers of oranges are now in the Los Angeles market for purchase of the new crop for shipment.



# DAIRYING AND HOG RAISING IN SOUTHERN CALIFORNIA.

Under the above heading we take the following article from the *Rural Californian*, published at Los Angeles:

There is no branch of the business of farming that brings in such certain and prompt returns as dairying. Milk, butter and cheese are cash articles, and unlike the income from grain and fruit which only comes once a year. The dairyman's income comes regularly every week or month during the year; he requires no credit, but has always cash on hand to pay in demand, besides he has another source of income, the sour milk and whey from the dairy makes the very best quality of pork, and in all well managed dairies it is expected that the profit on hogs will pay all the expense for labor, leaving the income from butter and cheese clear profit.

We offer greater advantages to dairymen than any other part of this State or the United States. One acre of irrigable land will produce all the food required for three cows, and give them green feed all the year; thus keeping them in the best possible milking condition. Our milking season lasts all the year. Butter is always ready sale at from 20 to 50 cents per pound, and fresh cheese at 12 to 16 cents per pound. Any dairyman can see at a glance that there is a fortune in dairying at these prices. We have such a steady demand from Arizona and New Mexico, that, at times, we are unable to supply it, and are obliged to import from San Francisco. This mining market is yet in its infancy, and as the population in the mines is increasing rapidly, our dairies will fall far behindhand. For years we have been writing to convince dairymen of the immense advantages that this country offers for their business, but they are difficult to convince. They can not understand that we have thousands of acres of moist valley land just suited for alfalfa, evergreen millet, corn and corn fodder, squash, etc. This land is very productive; water for irrigation from flowing wells is abundant; crops are certain, where a man irrigates they never fail; the climate along the coast is cool and pleasant, just right for dairying. And with plenty of green feed, ready sales and high prices, what more can be desired?

Upon the same lands that are so well suited for dairying, hogs can be raised and fattened for the market better and cheaper than anywhere else in the world, and with this additional advantage, that disease is entirely unknown among our hogs. Until the time comes to fatten them they are fed entirely on green vegetable food, which costs but little, is very healthful and accounts for the absence of disease. During the winter, after the barley is up six inches high, hogs are pastured upon it and grow and fatten rapidly, until the grain shoots up stems for heading, when the hogs are put on the alfalfa, or if they have it, the alfalfa, a wild grass, which is the best food in the world while it lasts. This will keep them until the barley has headed out and the grain is in the dough, then a part of the barley field is fenced off and the hogs are turned into it; after that is fed down, another section is fenced and fed off in the same way, until the whole field is gone over. It does not cost much to plow land and sow barley, the expense is in the harvesting, thrashing and sacking, bauling to the depot, and freight to market; but the hog is a labor-saving machine—he harvests, threshes and sacks the grain, and if the market is not too far distant, will pack it to market; but as the loss in weight is considerable, it pays better to haul him.

The secret of profitable farming in California is saving the cost of labor, and as we remarked before the hog is a labor-saving machine. After he has finished the barley fields, he cleans the stubble fields, and when the corn begins to mature, he will harvest that, too, and if the stalks are not too ripe he will eat them also, to get the sugar they contain. When hogs are worth seven and eight cents per pound on foot, as they are now, it pays better to feed corn and barley on the ground, than to harvest it. There is absolutely no waste in the corn, and what barley falls to the ground is not lost, but is seed for the volunteer crop of the next year. It is not uncommon for four or five successive crops to be raised from one sowing and plowing, and after the grain has been "hogged down," the volunteer crop is always a good one.

A dairy is a great advantage on a hog farm, as the sour milk is just what is wanted to sustain the young pigs from the time they are weaned until they are four months old. When they are young their stomachs have not sufficient capacity to enable them to thrive and grow on coarse food. After they are four months old, they will live on alfalfa, clover or any similar grasses and are particularly fond of alfalfa hay, and will fatten upon it; cut at the proper time, it contains a great deal of sugar, which accounts for it.

Dairying and hog raising fit well together and will pay better, for the amount expended for labor, than any other kind of farming. The results are certain. With water, land is sure to produce feed; corn and barley are unfailing crops—alfalfa and evergreen millet grow all the time; squash and pumpkins 60 tons per acre, roots in the same proportion, with the millet and alfalfa, are not much needed.

If a man wants a certain business that will pay well from the start, and keep on paying all the

time, we would advise him to get some moist land in our valleys, and try dairying and hog raising, and with tolerable management he will be sure to succeed.

## TRINITY COUNTY PROSPECTS.

That everything in a mining section depends largely upon the success attending the miner's efforts is a self-evident proposition. When we have a good season, with plenty of snow and rain, affording a liberal water supply far into the following summer, the miners wash large quantities of gravel, strip many thousand feet of bed-rock, and the yield of gold-dust is abundant. Laboring men get in many months work, wages are good and money is plenty. Business booms; the merchant, the banker, the tinker and the tailor, everybody in fact, prospers, and all are in the best of good humor, and look hopefully to the future. After a dry season, however, when water has been very limited, and the work done and gold-dust produced being only in proportion, all this is reversed and we are too apt to take a gloomy view of the situation. Such is the condition of affairs at present. Our county has just had one of the poorest mining seasons ever experienced, and while the mines have, without exception, paid well for the amount of work actually done, this is something lost sight of because general results fall below the average of former years.

This fact is one to be regretted, but it has no more to do with the possibilities of the future than has a crop failure from drouth, in a farming section, to do with the productiveness of the soil in another year when rain shall be plenty. The gravel mines of Trinity county are as rich to-day as they have been at any former period, and there are thousands of acres of auriferous gravel deposits within our boundaries remaining untouched, but only awaiting capital and enterprise to develop their hidden wealth, and make them famous among the hydraulic mines of the State. Wherever and whenever, in the past, a gravel deposit has been opened and intelligently worked in Trinity county, a success has been the result. Schemes have been devised and capital has been inveigled into gravel mining enterprises here which did not pay the fabulous dividends promised by their projectors; but these failures have resulted either from misrepresentation in the beginning or the total lack of practical management at a latter period. Some of these which have been almost abandoned by the holders—or suffered to lie idle by a lack of confidence in their possibilities—could easily be made paying properties if properly managed.

Quartz prospects in Trinity county are, at the present time, more promising than in any other section of the Pacific Slope. Deadwood district is producing its thousands every week, and new mines of rich rock are being discovered with a frequency that is most encouraging. Bullychump district is coming to the front with several well-developed and good paying mines proven, and others which give promise of good results in the near future. At East Fork but little work has yet been done, yet that little shows that the ledges in that section are rich enough to pay well from the very beginning. Just at the present, but little crushing is done, owing to the lack of water for running arrastras; but rock is being taken out and piled on the dump ready for crushing as soon as water comes. New mines are being discovered and new arrastras erected all the time, from which we may expect to hear good reports another season.

"It is a long lane which has no turn," and while we have been afflicted with three or four successive poor mining seasons, we yet have hope that the future has better things in store for our miners and the people of this section in general. One real, good, old-fashioned wet winter will make everything boom in Trinity as of old, and show to those who think our mines are played out, and the county going down, that we are based on as solid a foundation now as ever in the past. In this connection, we would call the attention of skeptics to the fact that, notwithstanding a dry season and prevailing dull times, the assessment roll shows a larger valuation of property this year than the last.—*Trinity Journal*.

## THE PINE FORESTS OF CALIFORNIA.

The mountains of California are heavily clothed with pines; two of the most valuable being the sugar pine and the heavy wooded pine. A writer on the vastness of timber in the State says: There is probably more timber, and of a quality not surpassed in the State, in Fresno county than in any other in California. The timber belt extends along the Sierras a distance of fully 200 miles, and varies from ten to forty miles in width. When the timber in the more accessible sections is exhausted, this valuable belt will be tapped, and its almost inexhaustible supply will give employment to thousands of persons, and will require millions of capital to handle it. The first incentive will be the California Central Railway. This will tap the same belt now being worked by the Madera Flume and Trading Company, but in time other roads will be built to tap the pines on the south side of the San Joaquin and of King's rivers. There are millions of dollars in the piney forests of Fresno county.—*Hendricksburg Enterprise*.

## PEANUTS.

The pea-nut harvest, says the Santa Barbara *Press*, is now coming on and the California crop is nowhere adequate to the demand for this favorite nut. All who have raised pea nuts this year, find a good price ready for them.

## ADVERTISERS

Can learn the exact cost of any proposed line of Advertising in American Papers by addressing Geo. P. Rowell & Co's Newspaper Adv'g Bureau, 10 Spruce St., N. Y.

## FOR SALE.

### A FINE RESIDENCE

—OF 16 ROOMS, ON—

Clay St. bet Franklin and Gough.

Also one of 9 rooms on Folsom street, between Twenty-first and Twenty-second.

Twelve lots in Bay View Home-land Association.

Lot on Twenty-seventh avenue, adjoining Point Lobos road, 70x120 feet.

One hundred and fifty thousand acres land in Tom Green county, Texas.

## 5,000 ACRES

Alfalfa, Orchard, and Vineyard Land

## FRESNO COUNTY,

—NEAR THE COUNTY SEAT—

At \$10 Per Acre.

For particulars apply to

ROBERT PERRIN.

402 Kearny Street, • San Francisco.

## COMMERCIAL INSURANCE COMPANY

OF CALIFORNIA.

Fire and Marine Insurance

Capital, paid in full, - \$200,000.00

Assets, June 30, 1883, \$390,524.06

Losses Paid Since Company was Organized, \$906,379.13.

JOHN H. WISE, President  
CHAS. A. LATON, Secretary

## OFFICE.

No. 405 California Street, S. F.

**A PRIZE.** Send six cents for postage, and receive free, a costly box of goods which will help you to increase your right away than anything else in the world. All, of either sex, signed from first issue. The grand prize to fortune opens before the workers, abundantly sure. At once address, TRICK & Co., Augusta, Maine.

## NICOLL, The Tailor.



JUST RECEIVED

A Fine Assortment of Foreign and Domestic Woolens for this Season.

CALL AND SEE OUR NEW PATTERNS!

Suits to order, from ..... \$20 00  
Pants to order, from ..... 5 00  
Overcoats to order, from ..... 20 00

## MEN'S, BOYS' AND CHILDREN'S SUITS AND OVERCOATS.

Manufactured by Ourselves, after the Most Approved and Latest Styles, at Short Notice.

WELL CUT, WELL MADE, STYLISH AND CHEAP.

You will do well to inspect before purchasing elsewhere.

CIVILITY TO ALL. NO TROUBLE TO SHOW GOODS.

## NICOLL, The Tailor,

PIELAN'S BUILDING,

816 & 818 Market Street,

SAN FRANCISCO.

BRANCH STORES IN ALL PRINCIPAL CITIES.

F. P. BACON, Pres. C. L. FOUTS, Sec

## GLOBE IRON WORKS CO.

MANUFACTURERS AND REPAIRERS OF ALL KINDS OF

MACHINERY AND IRON CASTINGS,

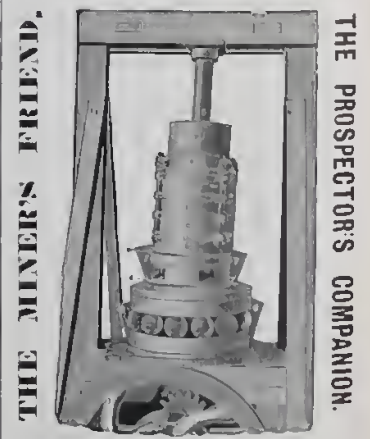
Hoisting and Mining Machinery.

LOCOMOTIVES.

Portable, Stationary and Marine Engines.

DYER'S CANNON BALL

Quartz Mill.



CAN BE PACKED ON MULEBACK OVER THE roughest mountain road, as it takes apart by its turns.

222 and 224 Fremont St.,

Between Howard and Colton

San Francisco



**JAMES G. STEELE & CO.,**

**Druggists and Manufacturing Chemists,**

**RESPECTFULLY CALL ATTENTION TO THEIR NEW ARRIVALS OF**

Foreign Perfumery, Colognes, Scented Toilet Soaps, Hair, Toilet and Nail Brushes, Combs, Hair Oils, Pomades, Face Powders and Cosmetics, Sponges, Patent Medicines, Etc., Etc.

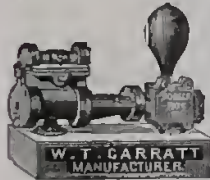


**JAMES C. STEELE & CO.'S  
Palace Drug Store,  
PALACE HOTEL,  
635 Market Street. - - SAN FRANCISCO.**

**W. T. CARRATT'S  
BRASS AND BELL FOUNDRY,  
SAN FRANCISCO.**

MANUFACTURER AND IMPORTER OF  
Church and Steamboat BELLS and GONGS  
BRASS CASTINGS of all kinds,  
WATER GATES, GAS GATES,  
FIRE HYDRANTS,  
DOCK HYDRANTS,  
GARDEN HYDRANTS.

A GENERAL ASSORTMENT OF ENGINEERS' FINDINGS.



**Booker's Patent  
CELEBRATED  
STEAM PUMP**  
The best and most durable in use. Also a variety of other  
**PUMPS**  
For MINING and FARMING purposes

**Root's Blast Blowers.**  
For Ventilating Mines and for Smelting Works.

**HYDRAULIC PIPES and NOZZLES.**  
For Mining Purposes.

**GARRATT'S IMPROVED JOURNAL METAL**  
— IMPORTER OF —

**IRON PIPE AND MALLEABLE IRON FITTING**

ALL KINDS OF

**SHIP WORK & COMPOSITION NAILS**  
AT LOWEST RATES.

**THOS. PRICE'S  
ASSAY OFFICE  
AND CHEMICAL LABORATORY,**

524 Sacramento Street, San Francisco.

**DEPOSITS OF BULLION RECEIVED, MELTED**  
into bars, and returns made in from twenty-four to forty-eight hours.

Bullion can be forwarded to this office from any part of the interior by express, and returns made in the same manner.

Careful Analyses made of ores, metals, soils, waters, industrial products, etc. Mines examined and reported upon. Consultations on chemical and metallurgical questions.

**AGENTS** wanted for The Lives of all the Presidents of the U. S. The largest and most complete book in America. Immense profits to agents. All intelligent people want it. Any one who has a successful agent. Terms free. Hallett-Brown Co., Portland, Maine.

C. P. SHEFFIELD, J. PATTERSON, N. W. SPADLING.

**PACIFIC SAW  
Manufacturing Company,**

17 & 19 FREMONT STREET,  
SAN FRANCISCO.

**A NEW WOOD SAW!**



**THE LATEST, THE BEST.**

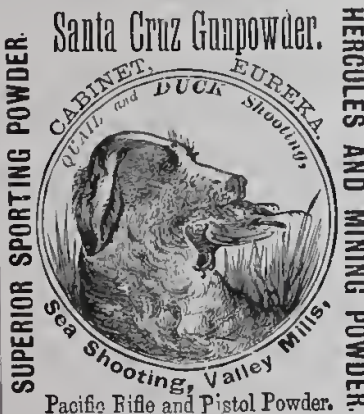
The above illustration shows an AUTOMATIC SELF-STRAINING WOOD SAW FRAME. The saw is strained by means of a Steel Spring secured in the wood end pieces with Metal Bands. With this device a saw is perfectly and automatically strained at all times. No cross bars or braces are required to give stiffness to the frame. The space in wood saw frames usually filled up with such devices is left open, giving the saw greater capacity for sawing large slices of wood, wide planks or boards. There is no screw straining rod to get out of order.

Price, complete with Pacific Saw Mfg Co's Extra Quality Blade, set and filed, ready to work, each, \$1.60; with their second quality blade, set and filed, ready to work, \$1.25; with imported blade, set and filed, ready to work, \$1.00.

**A LIBERAL DISCOUNT TO THE TRADE.**

**AGENTS FOR C. B. PAUL'S  
CELEBRATED FILES,  
Planing Knives, Currier Knives, Saw  
Mandrels, and Saws of Every  
Description Made to Order.**

**THE CALIFORNIA  
POWDER WORKS.**



**ROUND GRAIN,  
Bright Glaze, in Iron and Wooden  
Kegs.  
SHOT,  
CAPS,  
WADS,  
AMMUNITION,  
FUSE, Etc.**

PRINCIPAL OFFICE,

**No. 230 California Street,  
SAN FRANCISCO, CAL.**

**STOCKTON**



**F. R. CLARKE, Principal.**

A Practical Business Training School for the Young and Middle Aged of both sexes. Open day and evening throughout the Year. Tuition is less than on half usual rates. Excellent board \$10 per month.

**COURSES OF STUDY:**

Full Business Course, Full Normal Course, Teacher's Course, Review Course, Special Courses, Telegraphy, Languages.  
The COLLEGE JOURNAL, containing full particulars and postpaid. Address: F. R. CLARKE, Stockton, P. O. Box 15.

**THE SANTA CRUZ MOUNTAINS.**

A correspondent of the *Weekly Bulletin* furnishes that paper with the following concerning mountain lands in this county:

During the past three years a large area of wild lands in the counties of Santa Cruz and Santa Clara, principally of a hilly character, have been brought more or less under cultivation. For years this section was neglected, being considered almost inaccessible and worthless for agricultural pursuits. The South Pacific Coast Railroad, however, has induced travel in this direction, and given opportunities for the intelligent examination of the soil, and the measuring of its possible productiveness. That the locality is well adapted for fruit and grape growing, seems to be generally conceded, and many young orchards and not a few vineyards are to be seen springing up where formerly brush, scrub oak, small redwood and chaparral luxuriated in silent solitude. A good deal of public land that was considered of no account, has been taken up by pre-emption and homestead claims until there is little land that can be had for the simple matter of locating. The mere fact of a railroad bordering these properties, gave them some sort of a market value, which has been wonderfully increased by subsequent successful cultivation.

As showing the estimate placed by operators on this class of property, we append a few particulars of sales recently made in the neighborhood of Alamo, distant about three miles south of Los Gatos, as follows:

P. G. Simpson to J. Bishop, 80 acres, improved, \$3,750.

L. A. Cole sold 55 acres, partially improved, for \$2,400.

J. G. Floyd sold a tract of land of 39 acres for \$3,500. This piece is fairly covered with young fruit trees, but there are no buildings.

J. Seppi sold a tract of 80 acres to A. Riel for \$2,500. Vacant land.

A. Breckwold has bought a ten acre piece, unimproved, for \$500.

**GRAFTING ON ALMOND TREES.**

Mr. A. G. Hollister has made what may be called a very remarkable success in grafting on almond trees. He has now over a thousand almond trees grafted to peaches, nectarines, prunes, plums and apricots. He finds the most stone fruits do excellently well on almond stocks, but a few exceptions are found. Cherries do not unite perfectly with the wood, and apricots do not fully develop. Plums and prunes are especially adapted to this process. He has a thousand plum grafts now in flourishing condition; some were grafted three seasons ago, others last year. From the latter, we were shown some very fine specimens of the French *petite prune*. They are rich, meaty and remarkably sweet. On one almond stock Mr. Hollister succeeded in raising, this year, large, excellently-flavored egg plums, peaches, nectarines, apricots and two varieties of prunes. The samples show, conclusively, what may be done with the discarded almond tree. The grafting is done high up on the branches, where the new scion has the full benefit of the woody strength, sap, and many year's growth of the parent tree. The second year after grafting to prunes, as Mr. Hollister has found, a very fair crop may be gathered. He is preparing to thoroughly test the grafting of One's "Golden Drop" plum this season, and has faith in yet making the apricot a success. All his almond trees will thus be utilized. The same can be said of Colonel Hollister's place, where thousands of almond trees are now short of their tops and ready for transforming into more profitable fruits.—*Santa Barbara Press.*

**THE HOTATING IRON MINE.**

From all accounts, the iron furnace at Hotating is having a splendid run this year. They are making iron with much less fuel in proportion than formerly. They run off every eight hours, or three times a day, and average about ten tons of pig to the run. Their developments under ground show an encouraging increase in the ore deposit. New kilns are being built, and large quantities of bricks made for the erection of others. The pay roll of the company is large, and everything about the place shows life, push, progress and prosperity. All from out that way succeeds the present superintendent, Mr. Seeley, is the right man in the right place.—*Placerville Herald.*

**SMALL THINGS ON A FARM.**

It is the general custom of large farmers in California to pay too little attention to the growth of vegetables for home consumption. Thousands of farms in this valley do not produce their own vegetables, but depend upon the Chinese gardeners to supply them. This is not a very flattering recommendation for California farmers—not being able, or too shiftless, to grow that which goes so far toward making up a good living. In the Eastern States, the first thing that receives attention from the farmer is a well assorted garden of vegetables. The result is a thriftiness rarely met with in our State, for a living is assured from the garden, and the production of the field is sold to better advantage than where it must be rushed into market as soon as it is gathered, to meet indebtedness incurred for necessities which should have been produced upon the farm. Every farmer in the San Joaquin Valley should make it a point to grow sufficient vegetables to supply his own table. This will save a considerable sum that would otherwise go into the hands of Chinamen, and in case of failure of field crops, the garden will be found a very valuable assistant in keeping down expenses that generally run up in a very embarrassing manner about that time. Where a natural water supply is not to be obtained a well can be sunk and a cheap windmill erected. A few days' labor cannot be spent more advantageously on any farm than in seeding a small tract to potatoes, beets, onions, and the various "truck" that is usually grown for the use of man. Nowhere should this plan be more generally adopted than in this county. The artemisa belt affords the most encouragement in this matter, but there is no section of the county where the farmer cannot improve upon the old style of merely growing grain for money, and pending the money for those things which he should produce in abundance at home.—*Vallejo Register.*

**WINE MAKING.**

Arpad Haraszthy, in the course of some remarks at the recent State Viticultural Convention, said: "Fermentation once begun should be continued without any interruption. Fermenting in this country is not more thorough in large than in small casks. Less time is required for the fermentation of red than of white wines. When fermentation is slow or sluggish it is often made active by stirring the sediment at the bottom of the casks. White wines made from white grapes should be fermented on the skins. After the new wine has been drawn off from the fermenting cask it should be allowed to settle in a quiet place (moderately cool, but of uniform temperature) until the middle of March, when it should be drawn off into clean casks that have never been sulphured, either for red or white wines, and thus allowed to remain with the bung slightly loosened until the 20th of June, when it should be drawn into other packages clear, and if it is a white wine that is drawn, the package into which it is put should be sulphured with a small sulphur strip. The wine cellars should be clean, free from any gas or foul odors, with good ventilation, which should be sparingly used, and should be kept dark, but not so dark that the light cannot when necessary be admitted. While I advise the maturing of new wines in smaller packages, I counsel the keeping of old wines, whether red or white, in large packages where the evaporation is less and sudden changes of temperature less likely to occur."

**COPPER.**

J. W. Cook, no old Chicote, now farming in the vicinity of Orland, has struck a rich thing in connection with S. L. Jordan, a miner of much experience. They have discovered a rich lode of copper about two miles northwest of Smith's Mill, on Stony Creek. The lode is about twenty feet thick, with the necessary wall rock to indicate a lode. It has long been known that copper ore has been found on Stony creek. About twenty years ago, Mr. Sorbner, an old settler there, discovered some rich pieces of ore, but no lode could be found. The location of the present discovery must be about ten miles from where the first indications were found.—*Red Bluff Sentinel.*

THE RESOURCES OF CALIFORNIA is the best primer to send to your friends abroad.



## OUR MILLING INDUSTRY.

The astonishing growth of the milling interest in California is gratifying to every true lover of this sun-set land. At the present rate of progress it will not be many years until our surplus wheat will all be shipped abroad in the shape of flour, thus concentrating the bulk and value of our breadstuff exports and reducing the freights correspondingly. The chief increase in the milling business is at Stockton, Vallejo and Whentport. At Stockton there has been two large mills built within a year. These in addition to those already in operation there, puts that city in the lead of all other places in the amount of wheat converted into flour. Starr Mills at South Vallejo has for many years taken the lead of all other mills in the State for quantity and quality of flour produced; and their capacity has recently been largely increased. Notwithstanding this, their business has out-grown their power of enlargement at that point. To meet the growing demand the company has been incorporated, taking the name of Starr & Co., with a capital stock of two and one-half million dollars. Many of our wealthiest men have taken stock. The company has purchased land and water front on the Contra Costa side of the bay, near Port Costa, and call the new place Whentport. Here the largest mill in the State is in course of construction, which will be completed in time for the crop of 1881. They have also constructed large warehouses for the storage of grain. These buildings, it is needless to say, are approached by rail as well as by clipper. These and kindred enterprises are a sure indication of profitability of the milling business.

Next in importance in this line may be mentioned the Pioneer and Sacramento Mills at Sacramento, and the Buckeye Mills at Marysville. These consume enormous quantities of wheat during the year and their flour market has over-leaped the boundaries of the State or Pacific Coast. The North Star Mills, Tehama county, also deserves special mention. We are not advised as to its capacity, but it is very large. It is owned by M. C. Ellis & Sons who formerly resided on the Ellis farm in this county. We must not omit the mention of our own Yuba City Mill which has been enlarged from time to time until it has become one of the leading institutions of the kind in Northern California. All over the State there is a great impetus in the milling business, and mills are going up of more or less capacity. Many of the smaller mills have combined, and ship their product to their joint agent in Liverpool and elsewhere to the jobber and consumer.—*Sutter County Farmer.*

## THE LUMBER OF THE PACIFIC.

The lumber of the Pacific Coast will duplicate a hundred times the wealth of precious metals its mines have produced. It is difficult by simple description to give an idea of the extent and character of these forests. On the Columbia and Snake rivers we have seen a good deal of yellow pine, but the timber of Oregon and Washington is chiefly of fir, hemlock, cedar and spruce. The rivers of Washington are wooded with a heavier growth than those further south. A sample acre on the headwaters of the Chehalis, which empties into Gray's harbor, sixty-five miles north of the Columbia, was found to yield eighty-four fir trees, averaging 12,000 feet each, or 1,008,000 feet board measure of clear, merchantable lumber. This specimen acre was measured by a New York lumberman who was "cruising" the country for a saw-mill site. He told me that the heaviest timber was at the head of North river, which flows into Shoalwater bay, between the mouth of the Columbia and Gray's harbor. It is no unusual thing, he tells me, in this country to take 8,000,000 feet, board measure, from a quarter-section of land. The trees are over 200 feet high, and many of them 200 feet high, and many of them seven feet in diameter.—*Cor. Chicago Inter-Ocean.*

## CROP YIELD.

The Greenville Bulletin says: "Four years ago, Mr. Harry Williams set out a few grape vines at his place near town. This year the vines have produced a heavy crop of plump, handsome grapes; the fruit has ripened perfectly and is of very fine flavor. The grapes are Catawbas. Finding that they have done so well, Mr. Williams will set out a large number of vines as soon as possible."

## VALUABLE LAND.

The following is taken from the *Russian River Flag*, published at Healdsburg, Sonoma county:

W. N. Gladden purchased in 1872, some fifty-five acres of land one mile south of town and removed to it in April of that year. The place consisted of thirty-five acres of good land, ten acres light sandy soil, and ten acres of gravel. At the time of purchase there was on the place a two and a-half acre orchard, five years old, of various fruits. In 1874, Mr. Gladden planted five hundred peach trees on a light gravelly soil, also two acres of grapes, as an experiment on that kind of land. The result was such as to warrant the planting of all that kind of land in these fruits. This land in hay or grain would not produce \$5 per acre, but in peaches, it has yielded \$250, and in grapes, \$125 per acre. Mr. Gladden has now his entire place, except four acres, planted in orchards and vineyards. Fifteen acres of orchard and two acres of vineyards are in full bearing. Last year the gross receipts from the farm were nearly \$4,000. For his grapes he realizes the highest market price, they being the earliest grown in the vicinity, and the quality good. He has never had to use sulphur to prevent mildew, and the vines produce bountiful crops and do not make so much wood as on rich, heavy land. He says that along Russian River, hundreds of acres of such land, now considered worthless, can be made profitable by planting in vines. The raisin grape (Muscat of Alexandria), grown on such land makes as fine a raisin as can be found in the market. This year, the fruit being light, his place did not yield as much cash as last year, but he has a nursery of fine young trees that will do much toward making up the deficiency. With orchards and vineyards in full bearing, at present prices the gross proceeds of his place would be \$12,000 to \$15,000 per year. His leading fruits are, peaches, plums and prunes, yet he has all other kinds raised in the country.

## ORCHARD AND VINEYARD.

The *Chico Record*, in speaking of General Bidwell's orchard and vineyard, says:

It is estimated to cover 1,300 acres of ground, but it is so located along the creek, in tracts of all sizes and shapes, as not to appear half so much. If it was all in one body it would truly be a magnificent sight. As it is, the work of cultivation, and especially gathering, is much more difficult, but the pleasure of viewing is enhanced by the great variety of scenery which is associated. With orchards and vineyards of all trees to the right and to the left, the road winds hither and thither, while the tree-embowered creek flows in the midst, and clumps of timber come in here and there, making most remarkable diversity and beauty. We give the subjoined figures, kindly furnished by Mr. Gray, the superintendent. Less than half the trees are now bearing; peaches, 13,000; plums, 5,468; apples, 1,955; apricots, 3,970; pears, 1,735; cherries, 1,675; almonds, 2,800; quince, 60; fig, 50; total, 29,840. In 1880, there were 50,000 grape vines, and this year 12,000 were set out, making in all 62,000. There are also eight acres of blackberries.

## ADVANTAGES OF NAPA VALLEY.

It only needs a trip through a valley like this to demonstrate the truth of the proposition, and also to prove conclusively the wealth that is in store in the near future for the fortunate holders of good vine and fruit land in Napa valley. To any one who has the means to buy land, and the taste for country life, therefore few parts of this State which offer so many advantages and attractions as Napa Valley. Here are a few of them: Irrigation is not needed, the average rainfall being 26 inches and the air blowing over from the sea, giving fruit all the moisture that it requires; the soil is rich, easily worked and not inclined to wash; there is abundant wood in the hills, which are near at hand and form so striking a feature of the landscape; water may be secured at almost any place by boring down a few feet; the valley is brought within convenient reach of the city by a good railroad; it is settled by a class of people who make good neighbors—who believe in schools and churches, who have the means to improve their places and who take a pride in maintaining the reputation of the valley as one of the garden spots of the State.—*Cor. S. F. Chronicle.*

## MAKING ENSILAGE.

Dr. Shaw returned from his ranch at Los Alamos yesterday, bringing with him a sample of ensilage made from barley, oats, wheat, clover, alfalfa and "fox-tail" grass. It was put into the silo on the second of June, and taken out on October 9th in a perfect state. It was fed to the cattle and they ate it with avidity. Though not so perfect this year as the Doctor hoped, he expects next year to bring it out green instead of brown. This is the first attempt in Southern California and is a gratifying success. The silo is an important adjunct to the Doctor's dairy ranch. The innovation into the methods of preserving fodder has caused much excitement in Eastern and foreign agricultural circles, and it is gratifying to know that Santa Barbara can claim the lead in its successful inauguration in this section.—*Santa Barbara Independent.*

## W. M. BRANDON &amp; CO.

314 Kearny Street, Telephone No. 221, 3 bells, SAN FRANCISCO.

REAL ESTATE AND FARMING LANDS BOUGHT, sold and exchanged on commission and private account. Merced, Fresno and Tulare irrigated lands with water rights a specialty. Houses rented and rents collected. Money loaned.

**\$1,500.** 130 ACRES, ONE AND ONE HALF miles from town and railroad depot; soil a fine black loam; 50 acres level land, balance rolling; first-class house and good barn; 500 choice fruit trees and family vineyard; plenty of timber; a fine front stream runs through the place; a pair of mules, 2 cows; a lot of poultry, and all necessary farming implements are included in the price. W. M. BRANDON & CO., 314 Kearny street.

**\$2,500.** 74 ACRES IN SONOMA COUNTY, 2 miles from depot and postoffice and half a mile from school; 34 acres in perfectly level, balance gently rolling; good soil, particularly adapted for fruit; 2 acres hops; vineyard and orchard; and fine climate; 400 cords of wood cut and ready for hauling; plenty of standing timber, which will more than pay for the place; common house; five rooms; barn and out-houses; 2 cows; 4 good work horses, with their harness; 1 four-horse wagon; 1 two-horse wagon; 1 spring wagon; plow; cultivator; harrow. W. M. BRANDON & CO., 314 Kearny street.

**20 ACRES AND UPWARDS—1600 ACRES FINEST** fruit, grape or farming lands in the State; all rich, level land, and plowed ready for planting; we sell on small yearly installments; cheap land and convenient for transportation; best opportunity ever offered for a poor man to obtain a home; will suit all classes; plenty of rain and lovely climate. W. M. BRANDON & CO., 314 Kearny street.

**\$6,000.** 400 ACRES IN TULARE COUNTY near Tulare City, situated in the arid-irrigated belt; entirely free from alkali; will raise any crop that may be desired, as it can all be irrigated. No home or barn on the place. W. M. BRANDON & CO., 314 Kearny street.

**\$9,000.** 118 ACRES IN NAPA COUNTY, 2 1/2 miles from Napa City; good hard-floored house of 9 rooms and fine cellar; barn; windmill; tank; and other outbuildings; 25 acres of vineyard, foreign varieties; orchard of choice trees; all good land fenced in 5 lots; terms easy. W. M. BRANDON & CO., 314 Kearny street.

**\$1,000.** 240 ACRES IN NAPA COUNTY, 1 mile from Napa City, all fenced; new house and barn, with a plentiful supply of water. This ranch is now used for dairying, but is large property of the land is subject to cultivation, and being absolutely free from frost is excellent for orchard or vineyard. W. M. BRANDON & CO., 314 Kearny street.

**\$9,000.** 100 ACRES IN SONOMA COUNTY, one-half mile from school and only three miles from railroad depot and postoffice; all good land mostly level; balance gently rolling; all cultivated, except 40 acres which is pasture; good orchard and 30 acres in vineyard; house, barn and outbuildings; plenty of water; 2 horses; 1 wagon; all necessary farming tools; 10 tons of hay and a quantity of poultry go with the place. W. M. BRANDON & CO., 314 Kearny street.

**\$20 PER ACRE; 4,000 ACRES; THE FINEST** stock ranch in the State, near Visalia, in Tulare county; fenced; has six houses and barns on it; all choice lands, with unquestioned water rights, and for fertility can not be surpassed. W. M. BRANDON & CO., 314 Kearny street.

**\$5,000.** 70 ACRES, ALL HIGHLY CULTIVATED, in Tulare county, within one mile of Visalia; 30 acres in alfalfa, fine vineyard and orchard; all well fenced; water rights deeded with the place; good house and barn; A No. 1 soil; there is good timber on this ranch. W. M. BRANDON & CO., 314 Kearny street.

W. M. BRANDON & CO.,  
314 Kearny Street.

## F. A. HATCH &amp; CO.,

(Members S. F. Produce Exchange.)

## COMMISSION MERCHANTS,

122 CLAY ST., SAN FRANCISCO.

Flour, Grain, Wool, Beans, Dried Fruit, Honey, Etc.

LIBERAL ADVANCES MADE ON CONSIGNMENTS.

—AGENTS FOR—

Healdsburg X X X Flour

—AND—

UNION MILL FLOUR,

## EDGE HILL

VINEYARD, WINE CELLAR AND DISTILLERY,

Near St. Helena, Napa County, California.

SCHAEFFLER'S CELEBRATED VACUUM DISTILLED

SANITARY BRANDY

—AND—

Brands of Red and White Wines.

STANDING COMPARISON WITH THE FINEST BRANDS OF IMPORTED

Burgundy, Bordeaux and Rhine Wines.

Orders Received and Promptly Attended to by

WM. SCHEFFLER,

PROPRIETOR.

HOME MUTUAL INSURANCE COMPANY

(OF CALIFORNIA.)

Organized 1864.

JANUARY.....1883

FIRE ONLY.

PRINCIPAL OFFICE:

No. 216 Sansome Street, San Francisco.

Capital, paid up, Gold. - - - \$300,000 00

Premiums since organization, \$4,155,239 10

Losses, since organization, - - - \$1,859,286 64

Assets, Jan. 1, 1883, - - - \$717,156 63

Surplus for Policy Holders, - - - 710,860 63

Reinsurance Reserve, - - - 172,898 50

Net Surplus Over Everything, - 237,962 13

## OFFICERS:

J. F. HOUGHTON.....President  
J. L. N. SHEPARD.....Vice-President  
CHAS. R. STORV.....Secretary  
R. H. MAGILL.....General Agent.

## CALIFORNIA SUGAR REFINERY,

Manufacturers of the

## STANDARD SYRUP,

A SUPERIOR ARTICLE.

Put up in Barrels Expressly for Home Consumption.

ALSO,

## EXTRA HEAVY SYRUP,

In Barrels for Export.

## REFINED SUGARS,

At Lowest Market Rates.

Office: 325 Market Street, Up Stairs.

**GOLD** for the working class. Send 10 cents for postage, and we will mail you free, a royal, valuable box of sample goods that will put you in the way of making more money to a few days than you ever thought possible at any business. You can't get it without. We will start you. The work is work all the time, or in spare time only. You universally adapted to both sexes, young and old. That can really earn from 50 cents to \$5 every evening. That all who want work may test the business, we make this unparalleled offer, to all who are not well satisfied, we will send \$1 to pay for the trouble of writing us. Full particulars, directions, etc., sent free. Particulars will be given by those who give their whole time to the work. Great success absolutely sure. Don't delay. Start now. Address, STANCO & Co., Portland, Maine.



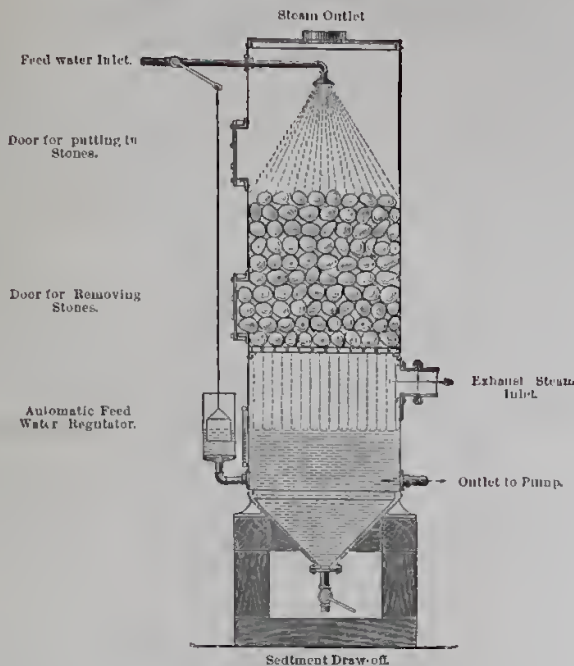
LLEWELLYN FILTER-HEATER,

Patent Issued Aug. 12, 1879, Re-Issued Aug. 15, 1881.

For the Prevention and Removal of

STEAM BOILER INCRUSTATIONS

WITHOUT THE AID OF CHEMICALS.



Heats the water to boiling point. Frees it from all chemical impurities. Saves from 30 to 50 per cent. of water by condensation. Prevents the formation of scale, and saves fully 25 per cent. in fuel.  
Further particulars with full descriptive circular and price list can be obtained at the office of the

LLEWELLYN STEAM CONDENSER MANUFACTURING COMPANY,

330 PINE STREET, ROOM 7,

SAN FRANCISCO, - - - CALIFORNIA.

Descriptive Catalogue Sent on Application.

Manufacture, Columbia Foundry, 133 and 135 Beale Street.

The California Lloyds

UNION

INSURANCE COMPANY

OF CALIFORNIA.

THE CALIFORNIA LLOYDS,

(Established in 1861).

FIRE AND MARINE

Paid-Up Capital, - - \$750,000

PRINCIPAL OFFICE,

Nos. 416 and 418 California St.

Agencies in all the Principal Cities of the United States.

G. TOUCHARD, President. N. G. KITTLE, Vice-President.

JAMES D. BAILEY, Secretary  
C. P. FARNFIELD, General Agent  
GEORGE T. BOHEN, Surveyor

PRESCOTT & CO.,

PROPRIETORS OF

Queen City Market,

DEALERS IN ALL KINDS OF

AMERICAN BEEF, VEAL, MUTTON, PORK AND CORNED MEATS OF EVERY DESCRIPTION.

ALSO IMPORTERS OF

Cheapest Eastern Hams, Bacon, Lard and Foreign Sausages of all kinds.

CORNER BEEF AND PORK FOR SALE BY THE BARREL.

1164 1158 Market St., and 6-8 Taylor St.

FIRE AND MARINE

INSURANCE AGENCY

OF

HUTCHINSON

& MANN,

Nos. 322 and 324 California Street and 302 and 304 Sansome Street,

San Francisco.

Agents for The

Agricultural Insurance Co., New York, \$1,521,630.

Fire Ins. Ass'n (Limited), London, Eng., \$1,573,291.

Glend Insurance Company, Philadelphia, \$1,208,615.

New Orleans Ins. Ass'n, New Orleans, \$573,216.

St. Paul F. & M. Ins. Co., St. Paul, Minn., \$1,048,673.

Standard Fire Office (Limited), London, Eng., \$1,300,000.

Teutonic Ins. Co., New Orleans, \$418,045.

MARINE.

The London and Provincial Marine Insurance Company, London, \$6,278,362.

La Fonciere Marine Ins. Co., Paris, \$2,250,000.

Capital Represented, . . \$23,007,160

SAN FRANCISCO, CALIFORNIA.

W. L. CHALMERS, Special Agent and Adjuster.

SIGNS OF THE TIMES.

Within the past year there have been many indications of a rapid and permanent growth in the northern part of California. Never before were there so many permanent improvements going forward. These all indicate the development our part of the State is making.

Foremost among these is the California and Oregon Railroad being pushed north. This has already increased the price of land; has caused the settlement of many families; and is opening up a new section of country. When completed, it will do for this part of the State what the Southern Pacific has done for the lower part of California.

The grand canal in Colusa county is another valuable improvement to real estate. No one, at present, can estimate the good it will do. It is safe to say, however, that every acre of land that can be irrigated by the waters of this canal will be worth \$100 within the next five years. A survey is being made up Feather river with a view to extending the California Northern Railroad north, through the counties of Plumas, Lassen and Modoc, so as to strike the Northern Pacific in eastern Oregon. This will open a splendid section of country but little known at present. We point to the fruit canneries as one of the things that indicate growth and development. The one built in Oroville will put up, this season, about 40,000 cans of fruit, and has given employment to about fifteen persons. Another year we may estimate that not less than 100,000 cans will be put up. This winter 25,000 fruit trees will be put out within a radius of twelve miles from this town. A large cannery will be in operation at Vina next year, and another at Yuba City. These indicate other improvements, also, of a durable nature. The Butte creek levee, built by Governor Stanford, is one of the marked improvements of the last year. The opening of the Johnson winery and distillery, at Marysville, and the winery at Moore's Station, in this county, will largely help the owners of vineyards and increase the value of land suitable for grapes. The increased price of land is a marked sign of progress. Land all through the Sacramento valley has perceptibly advanced during the past year. In many localities it has gone ahead from twenty-five to fifty per cent. of its former price. In nothing have we gone behind, while in wool, wine, lumber and grain the whole region has been advancing. — Oroville Register.

OIL DEVELOPMENTS.

A reporter of the Times lately met Mr. Burdette Chandler, the well-known oil man of this county, and obtained from him some information concerning the Pacute and Petrolia oil districts, in both of which he is interested. Mr. Chandler had just returned from his wells, and states that everything is progressing satisfactorily. The deepest well at Puente is now down 270 feet, and Mr. Chandler will put it down 1,000 feet, if necessary. At Petrolia the prospect is very encouraging. Besides Mr. Chandler's well, Bower & Co. are putting down one at the rate of thirty feet a day, a Santa Ana company is at work, with good prospect, on the Shanklin land. The oil from these districts sells readily at from \$4.50 to \$10 per barrel, and Mr. Chandler says he could readily find a market for 1000 barrels a day if he had it. In this city the Electric Light Works, the cannery and the City Foundry, are using this oil. The San Gabriel Wine Company and the Colton Lumber Works also use it. The demand for oil is very great and constantly increasing, and there is at present no more inviting field for capitalists than to develop the immense oil districts in the neighborhood of this city. — Los Angeles Times.

BROOM CORN.

We find the following in a late issue of the Chico Enterprise: "G. M. Johnson, a farmer northeast of Nord, has told us of an experiment he tried this year, which has proved successful, and is, we think, a matter of special interest to the farming community. Mr. Johnson sowed broom-corn seed on his adobe land after it had been summer-fallowed. He did not harrow it in, but a rain came and covered it. It came up finely and he has used the field for pasture all the summer. The plant has kept green, so as to be very fine for his cows. This fall he has turned hogs in, and they have devoured it, roots and all, so as to clear the field completely. He is much pleased with the experiment."

CALIFORNIA AS IT IS.

California has contributed to the wealth of the world, gold far exceeding a thousand millions of dollars, while its hardy pioneers have developed the mineral riches of its sister State so that they have jointly enriched the earth with more than double the value here mentioned. What would have been done without this vastness of wealth poured into the coffers of the earth it is hard to say. Who knows what it has done towards giving the United States its proud position among nations? We still produce, in California, from sixteen to eighteen million dollars worth of the precious metals annually. California, and her children, bring the figures up to eighty millions of dollars a year.

Our production of wheat has reached fifty-five millions of bushels, but we have wheat lands of inestimable fertility—thirty millions of acres—which, with high cultivation, will yield as much as the finest farm lands of England or the East. Twenty millions of acres of these lands are of the best in the world. We have of wine lands, in California, fifteen millions of acres, on the coast, thirty millions. Every hill-side can be converted into a fruit orchard. A large section of the San Joaquin valley will produce the finest cotton, while sugar cane grows in the south, and there are two millions of acres suited to the sugar beet. Southern California is the land of the vine, the olive and the fig, and there is no semi-tropical production that can not be raised there in profusion.

We are in the infancy of silk culture, but good judges in the matter set us down alongside of Lombardy. The lumber resources of the coast are practically inexhaustible, but they have been frequently set down at four thousand millions of feet yearly.

There are a thousand ways in which capital can be invested and money made, that only need taking advantage of to set the Pacific Coast, in prosperity, ahead of the world.—S. F. Journal of Commerce.

A REMARKABLE MINE.

From the following, which we take from the Sonoma Democrat, it would seem that some remarkable results are being achieved at the Golden Cliff mine, at Angel's Camp, Colusa county:

The mine is located on what is generally known all through the foot-hill counties as the mother vein. But the lead itself is not worked. It is from a belt of talcose slate lying directly to the east, and running parallel with the lode, that the gold comes. At the Golden Cliff, this belt is over one hundred feet wide. Everything within this distance is taken out and run through the mill. There are no shafts, drifts or stopes. The rock is simply quarried out from the surface along the hill-side. The gold is all sulphuret gold, and very fine. All along the surface and for some depth below the sulphurets are oxidized and decomposed, which renders the gold easily saved without the aid of any chlorinizing process. One hundred tons of ore, if the stuff can be called ore, is put through a twenty-stamp mill every twenty-four hours. Although the power used is steam, the total cost of mining and milling is only one dollar per ton. Water-power is now being introduced, by which means Mr. Goldstone, the Superintendent, expects to reduce the expense of extracting and crushing to sixty cents per ton. Mr. Goldstone informed a representative of the Union Democrat that the rock yields about four dollars per ton, and that the mine pays regular dividends. There are other mines of the same character, equally as large and fully as rich, so it is said, in the same vicinity, but no mills have been put up on them as yet, though one or two are in contemplation.

EVERGREEN MILLET.

Five hundred acres of land have been purchased in the Loupoc valley, by I. K. Fisher and Frank Smith. This land they intend to devote entirely to the raising of evergreen millet, a grass which is rapidly growing in favor with stock and dairy men. It makes a most excellent fodder, and horses and cattle prefer it to alfalfa, or almost any other feed. It is planted like corn, and those who have tried it say it flourishes abundantly in almost any arable soil, and spreads very rapidly from the root, needing no irrigation, and furnishing a steady, rank growth all the year round. — Loupoc Herald.



## THE MINING INDUSTRY IN CALIFORNIA.

The following interesting article is from a late number of the *San Francisco Stock Exchange*:

Owing to the depreciation in silver, our gold mines are in growing demand and are eagerly sought after. There is considerable inquiry from the Eastern and European markets, particularly for large veins of low grade ores—whether developed or undeveloped. Modern improvements and appliances have materially reduced the expenses of extracting and reducing gold ores. With a multiplicity of stamps, water power, plant power, power drills, rock breakers, self-feeding concentrators and the use of gravity in handling ores, low-grade ores can now be profitably reduced. Large veins or bodies are profitable investments, for, as a rule, the gold is more evenly distributed in the mass and more likely to carry their values to the deep.

The following are some of the mines that are being successfully worked under these conditions and noted as regular dividend payers: The Sumner mine, (Kern county)—80 stamps, water power, milled and milled, \$1 25 per ton; Zelle mine, (Amador county)—Deep workings and mine timbered, water power, \$1 75 per ton; Amador Consolidated, (Amador county)—from near surface several thousand tons have been mined and milled, \$1 25 per ton; Keystone mine, (Amador county)—from a depth of 400 feet, \$1 75 per ton; Homestead, (a group of mines) of Dakota Territory, hoisting by steam from a depth of 400 feet; mine timbered by square sets, each set replacing a cube of 21 tons of ore—the mill run by water power. In this mine the ore is being mined and milled, at \$1 63 per ton. This group of mines is running 550 stamps of 850 pounds each, which crush three tons to the stamp per 24 hours, or 1,650 tons per day. From these mines the average yield of 1,500,000 tons averaged \$5 75, and paid \$4,000,000 in dividends.

In California, particularly on the mother lode, the vein in places expands from 50 to 100 feet in width, or at least it is metal bearing for that width, inclusive of the slates, giving an average value per ton of from \$1 to \$6, and in many places can be worked by open quarry to a considerable depth, and by adit level to a much greater depth. Under these conditions it should not cost over \$1 per ton to mine and mill with proper appliances. But with this class of mines the poor man has no business, as five or ten stamps would afford but small return, if any. From 100 to 150 stamps are required, crushing from 300 to 1,500 tons per day. The great saving is in labor, as a large mill can be run at but little more expense than a small one, the difference in wear, tear and power, cutting but little figure on the principal. The wholesale merchant or mining capitalist can get rich when the retail merchant or one-horse miner would fail.

An extensive mine of the class referred to changed hands last week; William Werry of Placer county being the vendor, and George W. Grayson, Esq., the *Midas* of California, the purchaser. Grayson seldom makes mistakes; he looks before he leaps, and always gives a contemplated purchase a personal and thorough examination before buying. In the business of legitimate mining he has amassed a large fortune. The mine referred to is known as the Mammoth mine, or Big Vein, consisting of five locations, each 1,500,000 feet. The vein, where developed by shaft and crosscut, shows a width between walls of fifty-two feet, carrying ore evenly distributed through the mass, and averaging from repeated mill tests, \$5 50 a ton of gold values. It is the purchaser's intention to thoroughly develop the mine by adit level and crosscuts to a great depth, before erecting a mill. This mine will easily warrant 100 stamps. Water for power in any desired quantity can be obtained from the North Fork of the American river, by building a ditch about six miles long. The mine can be worked by an open quarry for a long time and to a great depth.

It is situated about three and one-half miles southerly from Colfax, on the line of the C. P. R. B. and is surrounded by a forest of timber. These developments will undoubtedly be the means of reviving the now deserted and almost forgotten town formerly known in the flush times of California, in 1850, as Illinois town, which is not far from the mine. On its site there is not a house standing and not an inhabitant to tell the tale of its rise and fall? In its palmy days, previous to the advent of the iron horse, it was populous and prosperous with merchant bankers. The forwarding house of Benson & Wallace had an agency there; Adams & Co's agents bought gold dust and sold exchanges; saloons sold firewater; gamblers plied their vocation, and tempted the honest miner with his rough dress, unkempt hair and well filled buckskin purse to squander his hard earnings on the turn of a card.

The placer mines adjacent to the town, particularly in Burnt canyon and its tributaries, often paid as high as \$100 per day to the hand. One ounce of gold, or as much as a man could hold between his thumb and finger, was the price of a glass of whiskey. The Big Vein purchased by Mr. Grayson, no doubt was the source of the gold found in Burnt canyon, as it and its tributary ravines cut the vein and received its washings. The granger of to-day with his engine and the miner then. It was in the placer mines that he accumulated the where-

withal to purchase his farming land in the valley. Both Sacramento city and belligerent Marysville courted the miner's trade. The fruit of his labor, (gold) was king. The growth and prosperity of these cities were entirely owing to the miner. They now—serpent like—are trying to sting the hand that gave them food. The granger, with his potatoes and squash, rules the roost, and the miner takes a back seat. He undoubtedly has both prior and vested rights, which should not be ignored by our courts.

## GOVERNOR STANFORD'S VINEYARD.

The following brief account of the largest vineyard in the world, located at Vina, Tehama county, we take from the *Red Bluff Peoples' Cause*:

Through the kindness of William H. Smith, Superintendent, we had the pleasure, recently, of viewing the immense vineyard of Gov. Stanford at Vina. The vineyard is probably the largest in the State. There are, at present, 10,000 acres planted in grape vines of different varieties, the greater portion of which are young, and as yet have not been productive. The old Gerko vineyard, which forms the nucleus, covers a space of seventy-five acres; to this, 1,000 acres of young vines were added in 1882, and 1,500 acres in 1883. The system that has been followed in planting vines is very systematic—the vines being an equal and exact distance apart. They are all very thrifty and form a beautiful sight when viewed from any direction.

The irrigation of this vineyard is, perhaps, the most complete in the world. At regular intervals, through the vineyard, avenues are cut which are forty feet in width; through these avenues are run irrigating ditches, with a drive-way on each side. The blocks thus formed by the irrigating ditches are about fifty yards wide, but extend at great length, and contain about 100 acres each. In this way the system of irrigation is made complete, and all the land receives an equal proportion of water. Every two of these blocks are planted to a different variety of grapes. The main ditches run east and west across the field, and where the field is uneven, intersecting ditches are made. In some cases it has been necessary to construct ditches to carry the water over lower lands. A flume, 1,800 feet long, has been built to carry water over the alfalfa fields.

Besides the 10,000 acres planted in vines, the Governor owns 10,000 acres more that he has lately acquired by purchase; some of which he is now putting to grain, and some is used in pasture. He is contemplating, however, extending his vineyard, making new additions to it each year.

The amount of work that has been done there within the past two years is immense, and one would hardly think that such a system of irrigating could be completed in so short a time. The water used for irrigating purposes is taken out of Deer creek, and we were told that last year all the water in the creek was used.

The grape crop, this year, has all been shipped below, they not attempting to manufacture any wines there.

There is, however, on the place a good distillery, which they will probably put in use in a couple of years.

The grapes raised are all of the wine-making species. The leading varieties are the Berger, Zinfandel, Chardonnet, Blauvelva and Trousseau.

Mr. Smith, the Superintendent, is a very practical business man, and understands his business thoroughly. His system of planting vines is to have them first rooted in a nursery, and then plant them in the vineyard. In this way it does not take the vines long to start.

The improvements on the place, in the way of houses and barns, are considerable; there being a good dwelling house on the premises, which is occupied by Mr. Smith's family when they are at home, but Mr. Smith is now enjoying a period of widowhood, his family being in the East. Besides the dwelling there are numerous out-houses.

## NEW ALMADEN MINES.

The quicksilver mines at New Almaden are turning out large quantities of ore at the present time. Five hundred and fifteen men are kept fully occupied, working ten hours per day. The majority of them are Englishmen and the balance Mexicans and Chilenos and a few Chinese. Miners are paid from \$2.00 to \$2.50, and surface men \$1.50 to \$2.00 per day. Out of these wages, single men have to pay 75 per cent for board, and from \$3.00 to \$6.00 per month for lodging. Married men have houses to live in, but have to pay rent. There is a Catholic and also Methodist church on the hill, a handsome school house, and a commodious hall for amusements. Four shafts are worked, the lowest at a depth of 2,000 feet, or 3,000 feet below the level of the sea; and there are estimated to be fifty miles of underground drifts, all well timbered and ventilated; and the system of water supply is most complete. This article is conveyed from a noth boring mountain, by means of a two and one-half inch pipe, at the rate of thirty gallons per minute. —*Sierra Blanca Journal*.

## WHEAT.

Morocut farmers are preparing to plant the largest area in wheat ever seeded in that county.



BROAD GAUGE.

## WINTER ARRANGEMENT.

Commencing Sunday, Nov. 11th, 1883.

And until further notice, Passenger Trains will leave from, and arrive at, San Francisco Passenger Depot, (Townsend St., between 3d and 4th streets) as follows:

LEAVE S. F.	DESTINATION.	ARRIVE S. F.
6:50 A. M.		6:25 A. M.
8:30 A. M.		8:10 A. M.
10:40 A. M.	San Mateo, Redwood, and Menlo Park....	9:30 A. M.
3:30 P. M.		10:02 A. M.
4:25 P. M.		10:30 P. M.
6:10 P. M.		4:50 P. M.
6:50 P. M.		5:55 P. M.
8:30 A. M.	Sanita Clara, San Jose and, Principal Way Stations.	9:30 A. M.
10:40 A. M.		10:02 A. M.
3:30 P. M.		3:30 P. M.
4:25 P. M.		5:55 P. M.
10:10 A. M.	Gilroy, Pajaro, Castroville, Salinas and Monterey...	10:02 A. M.
3:30 P. M.		5:55 P. M.
10:40 A. M.	Hollister and Tres Pinos.	5:55 P. M.
10:40 A. M.	Watsonville, Aptos, Sequei (Camp Capitola) and Santa Cruz. "Broad gauge"; no change of cars.	10:02 A. M.
3:30 P. M.		5:55 P. M.
10:10 A. M.	Soledad and Way Stations.	5:55 P. M.

\* Sundays excepted. † Sundays only (Sporting Train).

STAGE CONNECTIONS are made with the 10:40 A. M. Train, except PISCADERO Stages via San Mateo and Redwood, which connect with 8:30 A. M. Train.

SPECIAL ROUND-TRIP TICKETS—At Reduced Rates—to Monterey, Sequei and Santa Cruz; also, to Paraiso and Paso Robles Springs.

EXCURSION TICKETS—Sold Saturday and Sunday—good to return on Monday—to Santa Clara or San Jose, \$3.50; to Gilroy, \$4.00; to Monterey or Santa Cruz, \$5.00, and to principal points between San Francisco and San Jose.

TICKET OFFICES—Passenger Depot, Townsend Street; Valencia Street Station, and No. 613 Market Street, Grand Hotel.

A. O. BASSETT, Superintendent. H. R. JUDAH, Asst. Pass. & Tkt. Agt.

SOUTHERN DIVISIONS.

For points on Southern Divisions and the Rest, see C. P. R. R. TIME SCHEDULE.

## OCCIDENTAL AND ORIENTAL

## STEAMSHIP COMPANY

## FOR JAPAN and CHINA

LEAVE WHARF CORNER OF First and Brannan Streets, at 12 M., YOKOHAMA & HONGKONG

Connecting at Yokohama with Steamers for Shanghai.

Will sail from San Francisco:

OCEANIC.....Tuesday, December 18th, 1884.  
ARABIC.....Thursday, February 7th.  
OCEANIC.....Saturday, March 8th.  
ARABIC.....Saturday, April 26th.  
OCEANIC.....Tuesday, May 27th.

Excursion Tickets to Yokohama and Return at Reduced Rates.

Cabin plans on exhibition and passage tickets to sale at C. P. R. & Co's General Offices, Room 74, Corner Fourth and Townsend Streets.

FOR FREIGHT apply to GEO. H. RICE, Freight Agent, at the Pacific Mail Steamship Company's Wharf, or at No. 202 Market street, Union Block.

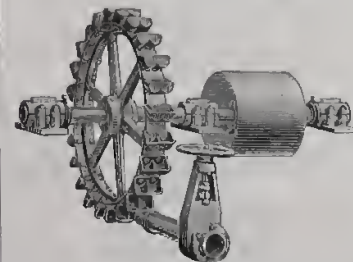
T. H. GOODMAN,

Gen'l Passenger Agent

LELAND STANFORD,

President.

## PELTON WATER WHEEL



MANUFACTURED BY

L. A. PELTON, - - NEVADA CITY, CAL.

It gave the highest per cent. of power (91.02 per cent.) at the public test of the reaction turbine water wheels by the Idaho Mining Company at Grass Valley, commencing April 30th, 1883. This was the highest per cent. over all wheels now in use. It was at once adopted by said company. Sent for Price List and Full Particulars.

\$66 a week at home. \$5 outfit free. Pay absolutely no risk. Capital not required. Under, if you want business at which you are of either sex, young or old, can make good pay all the time they work, with absolute certainty, with no particular to it. H. B. & Co., Portland, Maine.



## QUICK TIME AND CHEAP FARES

FROM

## AUSTRALASIA, CHINA &amp; JAPAN,

TO

## NEW YORK

AND

## LIVERPOOL.

## THE GREAT TRANS-CONTINENTAL ALL-RAIL ROUTE

VIA

## CENTRAL PACIFIC RAILROAD

CONNECTING WITH

## Union Pacific Railway

AT OGOEN, UTAH,

AND

## SOUTHERN PACIFIC RAILROAD

CONNECTING WITH

## Atchison, Topeka and Santa Fe Railroad,

AT DENING, NEW MEXICO,

AND THE

## Galveston, Harrisburg and San Antonio Railroad,

AT EL PASO, TEXAS.

## THROUGH EXPRESS TRAINS

Leave San Francisco Daily.

Making prompt connection with the several Railways Lines in the Eastern States, for all the Cities of the

## UNITED STATES AND CANADA.

CONNECTING AT

## NEW YORK

With the several Steamer Lines to

## England, France.

AND ALL EUROPEAN PORTS.

## Silver Palace Sleeping Coaches,

Second to None in the World.

Are run daily between SAN FRANCISCO and NEW YORK, and intermediate points. These Drawing Room Cars by day, and Sleeping Cars by night, are unequalled for comfort and convenience to the Passenger while en route—combining the elegance of a private parlor, and all accommodations pertaining to a well-furnished chamber, with comfortable couches, clean bedding, etc. A competent Porter accompanies each Car, to attend to the wants of our Patrons. Children under Twelve years of age, Half Fare. Under Five years of age, Free. 100 pounds of Baggage per full Passenger free, 50 pounds of Baggage per half Passenger, free.

## PRINCIPAL TICKET OFFICE

AT THE

## OAKLAND FERRY LANDING,

Foot of Market Street, San Francisco.

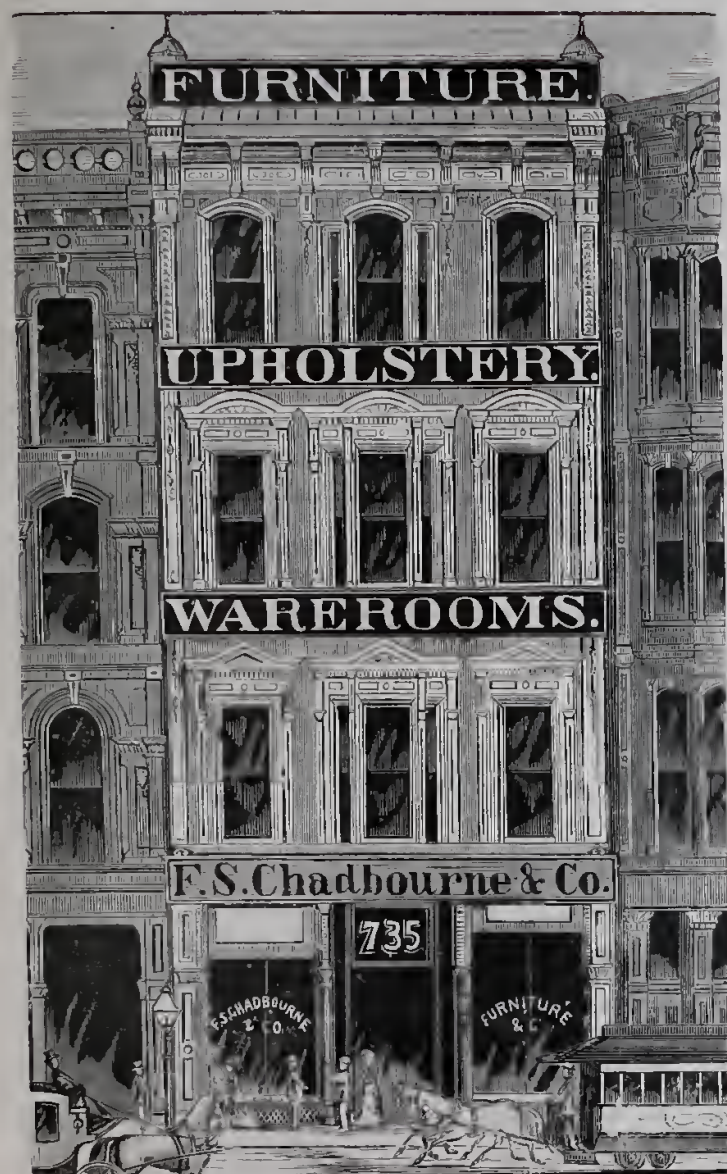
Where passengers, calling in person, can secure choice of routes and sleeping-car accommodations.

A. N. TOWNE, Gen. Superintendent. T. H. GOODMAN, Asst. Pass. & Ticket Agt. SAN FRANCISCO, CAL.



F. S. CHADBOURNE &amp; CO.,

741, 743 AND 745 MARKET ST., - SAN FRANCISCO.



IMPORTERS, MANUFACTURERS,

—AND—

Wholesale and Retail Dealers in

FURNITURE AND BEDDING

OF EVERY DESCRIPTION.

Chamber, Parlor, Library and Dining  
Suits,

IN AN IMMENSE VARIETY OF STYLE,

Book and Library Case Wardrobes, Ladies' Writing Desks, Turkish

Easy and Lounging Chairs, Etc.—Hotels and Private

Residences Furnished.—Designs Furnished

and Estimates Given.

F. S. CHADBOURNE &amp; CO.,

741, 743 and 745 Market Street, - - - San Francisco.

CORNER FIRST AND YAMHILL STREETS, PORTLAND, OREGON

## NAILING SOME SLANDER.

We think that Mr. L. N. Hoag, the active and well-informed immigration agent for the Central Pacific Railroad at Chicago, used a good deal of fine powder on some very poor game recently. The compensation for the hunt, however, is found in the practical information given in Mr. Hoag's reply in a very coarse assault, made through one of the Chicago papers upon California by John A. Tyrrell. It appears that Mr. Tyrrell visited this coast recently, and while here, received impressions that disagreed with him, and, on his return to Chicago, he worked on his bill in an attack upon the State and coast. Mr. Tyrrell declared that it was well enough to go west, but not too far west, that the Far West has reached its limit of civilization and settlement, and that west of the 100th meridian no farmer can succeed. First, in California, he found plentiful, but it is worth nothing; anyone can have it for picking up; and fruit farms bankrupt their owners. Finally, he says, the commerce of the whole Pacific Coast is dying out. It is very evident that Mr. Tyrrell is either dyspeptic or else he is a colossal falsifier. In either case his statements and estimates are too absurd for serious consideration by well-informed people. But it so happens that there are masses of people at the East, who are not well-informed as to the facts relative to this coast; and another large class has been deceived by our own folly in the past in painting pictures in over-color, of the prospects, advantages and local attractions of this State. To reach any, who might be led to rely upon Mr. Tyrrell's absurd stories, was what probably induced Mr. Hoag to answer that gentleman's bilious charges. This he does in a recent number of the Chicago *Inter-Ocean*. He gives the inebriated Tyrrell a few facts to digest that will probably remain unanswered. Thus he shows that our wool clip is 45,000,000 pounds, that our mechanical products aggregate \$116,000,000 annually; that while the export value of cereals, in 1879, amounted to \$14,920,586, in 1882, they reached \$12,137,231; that the total for the five years, between the two dates, aggregated \$110,413,781; that we have, in operation, no less than 2,488 miles of railroad, over 453 miles of which were built within one year, that our taxable property has increased, in a single year, over \$101,000,000, and so on through other interesting statistics. Mr. Hoag also quotes, in reply to Mr. Tyrrell, from statements by Curson & Wilson, fruit-growers; from L. J. Rose, orchardist; and from W. H. Jessup, fruit-grower. He points out that our population has increased steadily; that we have enlarged our vineyards, annually, by hundred of acres; that the income of the fruit and grape growers for three years, has averaged \$10,000,000 a year; that the average income of the 92,000 farm residents of California is fully up to the proper proportion compared with other agricultural districts, according to the census estimates; and that the farming class is rapidly increasing in numbers and independence. In 1880, California produced 60,000,000 bushels of wheat, having a population of but 800,000, while Illinois, with a population of 3,015,720, 1,900,000 being farm residents, produced but 60,500,000. The average wheat produce per farm resident in Illinois is sixty-one and a half bushels, while in California it is 652 bushels. It is unnecessary to follow further in the refutation. Sufficient has been shown to give point to the value of California having "a man on the ground" in the "old West," to nail the lies that are told of the "Far West."—*Sacramento Record-Union*

## OUR TIMBER LANDS.

Not the least value of Fresno county's resources is its timber lands. The Sierras, along their entire line in this county, are clothed to their summits with a body of as fine timber as ever grew. In no place to California have we seen such lordly pines, pitch and sugar, nor more stately spruces, than grace the slopes of our mountains. This vast belt of timber is worth millions of dollars. This timber belt occupies a total length of about one hundred miles, with an average depth of thirty miles, in this county. Of course, much of it is difficult of access, still it is all of great value, and while at present it seems that this giant forest is inexhaustible, still it will take but a few years to entirely denude the mountains unless greater care is exercised. Thousands of trees are wantonly destroyed annually, and every year the young trees are killed or seriously injured by the forest fires set by careless campers and thoughtless herdsmen. The laws of the country against the wanton destruction of timber on the public lands ought to be rigidly enforced, and if it is possible to find out who originates the numerous forest fires they, too, ought to be severely punished. This great belt of timber should be preserved. It is needed by the people of the present day and by those who are to follow us, and it should be carefully guarded by every good citizen. The destruction or injury of the young trees should be avoided, and everything possible done to protect and maintain the mountain forests.—*Fresno Examiner*.

## THE MEAT PROBLEM.

An Eastern paper has been considering the cheap beef problem, and according to its conclusions the day of cheap beef has gone by. The vast regions that have heretofore been devoted to grazing are passing gradually into the hands of the agriculturalist, and the cattle-ranges are consequently growing more limited, and their area can not be enlarged in proportion to the rapidly increasing population. Without free grazing, the expense of raising cattle must be largely increased, so it must follow that as the occupation of the cattle-raising regions is extended, the number of cattle must be decreased. Some of the food problems that have troubled Europe may yet arise to perplex our people as with our rapidly increasing population.—*Los Angeles Mirror*.

## IMMIGRATION TO CALIFORNIA.

No matter of public interest can be mentioned, of more direct importance to every citizen of California than the question of immigration. California is an immense State in a territorial sense as well as in mineral resources, agricultural and mechanical wealth. Yet with all these advantages our population does not reach a million souls. And when we compare the growth of California with other Western States, we are forced to admit that she occupies a back seat. Ohio and Illinois, both of which are smaller States than California, have each considerably over two millions population. Missouri, also a smaller State than our own, has more than doubled her population since the close of the war, and now has nearly 2,250,000. Kansas and Colorado have also increased in population since the close of the war more than five times as rapidly as has California. The two last named States are much younger than California, and a great deal smaller, while Missouri is by no means an old State. Then the question naturally arises, why is it that California still lags behind? Her climate is infinitely superior to any of the States named; her mineral wealth is a thousand times greater; her fruit growing, stock raising and agricultural resources are among the very best. Then why have population and wealth failed to find their way to the Golden State? The answer is an easy one. It is simply because other Western States, realizing the great advantages of rapid growth and development, have taken advantage of the opportunities afforded them to secure a share of the tide of immigration westward bound, and have spared neither money nor facilities for accomplishing it. The competition among these States for securing a share of the immigration, was even greater than that of business firms in securing trade. California adopted the old foggy plan, and, as a natural consequence, remained far behind in the race for progress. While her sister States had sent out their agents and drummers, advertising and showing their resources and soliciting patronage, California depended on her well-worked gold mines to bring her share of the custom. But this policy will not answer the demands of the present age of progress and activity. As it is with business men, so it is with States. The firm that fills itself with goods, be they ever so superior in quality, and then depends on the public to come in and buy, will most certainly be left by the enterprising houses who send out drummers.

But the dawn of a new era for California in this respect is just at hand. We have at last awakened to a realization of the alarming consequences of a do-nothing policy, and the fruits of the new departure are already becoming manifest.—*Gold Gazette*.

## IMPORTED FRUITS.

A writer in the *Alta* furnishes that paper with the following facts and figures: "The Importation of Mediterranean fruits is something of interest to California because it gauges the extent of the demand which our orchardists expect to eventually meet with home products. So long as millions of dollars are annually sent out of the country in payment for Mediterranean raisins, figs, prunes, nuts, oranges, lemons, and olives, the fruit-growers in California can feel free from anxiety that they overdo the business in those lines. There is no fruit that has been more profitable in California for a series of years past than prunes, and yet the quantity produced here is but a drop in the bucket compared with the quantity imported. For the fiscal year 1882, the value of the importation of prunes was \$3,033,966.10, or about half as much as the value of the initial fruit crop of California. There has been an enormous increase in the consumption of dried prunes among the poorer class in the Eastern States, and it is said the demand shows a great advance every year in which there is a failure of the apple crop as in the case this season, apparently the production of prunes can never be overdone in California. Turkey, Bohemia, Hungary and Moravia are the countries from which our importations of prunes are principally made. Of raisins the importation last year was worth \$3,260,033.74, or a little more than the value of the prunes imported. It is universally admitted that the production of first-class raisins in this country cannot be overdone. Figs were imported last year to the value of \$700,000. This is a fruit which gives very little trouble to grow, and which can be brought to as great perfection here as in any part of the world. Other fruits were imported last year to the following extent: Currants, \$1,338,885; dates, \$218,564; grapes, green and dried, \$700,000; lemons and oranges, \$5,477,796; nuts, \$1,000,000. Here is a total of nearly \$16,000,000 paid for foreign fruits, all of which, except perhaps dates, can be produced equally well to this country."

## LAND.

A prominent citizen of this place said that he believed the best lands in this county, now valued at \$60 to \$75 per acre would command \$150 to \$200 per acre in five years from this date. These lands, he thinks, will be set out in fruit which will be grown for eating and drying. We think the gentleman's judgment is good and hope his predictions may prove true.—*Tahama Times*.



## FROM EUROPE TO CALIFORNIA.

A special correspondent of the *Record-Union*, writing from New Orleans, October 9th., thus speaks of the new route from Europe to this State:

The most pleasant and direct route for the European immigrant, via New Orleans to California, has been operated successfully since the beginning of this year, and we are positive that ere long this same route will be preferred by the first-class traveler from Europe to the Pacific coast, and even by the California pleasure-tourist. To make this possible it will only be necessary to add a few first-class passenger steamers equaling in outfit, elegance and comfort the steamers of the English lines between New York and Liverpool. With such a regular connection, and we may hope for it shortly, the new line is sure to be patronized more and more from year to year. The men who have embarked in the gigantic enterprise of establishing the new direct route between San Francisco and New Orleans, will undoubtedly leave nothing undone to stimulate the efforts now being made to popularize the new route between Europe and New Orleans. Even at present, the advantages in making the journey East via New Orleans cannot be underestimated for all southern and southwestern points, and the connection with St. Louis and Chicago via the fast Jackson route is so quick and direct that there is, apparently, but little difference in the time made by other lines. In the winter season this will be essentially the most pleasant and safe route from the West to California, as no delay need be apprehended on account of inclement weather. Another advantage is the through sleepers from San Francisco to New Orleans—the longest ride by rail now in America—that is, without change of train.

The picturesque scenery of the Texas and New Orleans divisions of the road deserves the attention of the tourist. The Grand Canyon of the Rio Grande of Texas, through which one of the most complicated and wonderful works of railroad engineering has been built, and where the trains pass the grandest scenery imaginable, most certainly bears comparison with any other landscape view of American railroads. The length of the river, the exquisite perspectives, the ever-winding course beneath the towering and enormous overhanging rocks, continually produce surprises, and force one to conclude that it is a canyon-ride actually surpassing those of the Rockies of Colorado, and, indeed, all others. In contrast to the narrowness of the Colorado canyon views, the Rio Grande sweeps broadly and majestically at the base of the sandstone terraces and perpendicular walls, reminding one vividly of the beauties of the Hudson river, viewing the ever-winding course of the river, hundreds of feet beneath the thundering train, framed in by the most picturesque of hills and mountains, covered with thick groves of the exotic cactus. The yellow waters of the Rio Grande, stretching toward the orient, gladden and sparkle in the morning sunlight like a field of molten gold, and are mysteriously somber and gloomy in the pale moonlight. The gray rocks and precipitous crags increase the varied colors of the weird landscape, with its peculiar vegetation—the cactus, as well as a species of aloes, the Spanish dagger, shooting high into the air from a luxuriant palm-tree bouquet. The glorious mountains are in view, far and near, lifting up their towering tops from the other side, which is Mexican territory.

Like a light cloud of mist, we see before us the "Devil's river," whose scenery is full of charming effects. Here again the train winds its way around rocky precipices, under high towering rocks, whose tops likewise hang over our narrow path like vaulted roofs, when suddenly the rock-bound gateway opens itself upon broad plains, fertile prairies, emerald-hued fields—a broad expanse through which the united waters of the Devil's river and the Rio Grande, follow their long passage towards the Gulf of Mexico. Here we breathe the salt air, which comes to us from the distant gulf, and fully enjoy the wonderful effects of this exhilarating climate.

Most interesting, also, is the ride through the cultivated region of Western Texas, until arriving at the quaint old town of San Antonio, the true type of Western Texas, another land of plenty. And hence we roll on through a vast valley region of plains and sun-bathed slopes; past a score of neat villages, embowered in groves of live-oak and pecan trees; past a seemingly endless chain of flourishing colonies and settlements, unnumbered cotton and cornfields, over the Brazos bottoms, with their black mold soil; past sugar mills and plantations; through forests of the Brazos, enormous trees, weird in their fantastical beards of moss; through open prairies, dotted with cattle or sheep; past the forests and bayous of Houston, the great commercial and railroad center of Southern Texas, until we reach and cross at last the Sabine river, the eastern boundary of the Lone Star State.

Now we are in Louisiana, and traverse one of its richest and best cultivated regions. We see crystal-clear lakes, picturesque forests, shaded bayous, endless-opening vistas of forest glades, of happy sylvan retreats, of fine plantations, one after the other; bosky woodlands, rolling prairies dotted with the stock, cotton fields in the highest state of cultivation, and corn, sugar and rice-fields everywhere. We cross the beautiful river Atchafalaya

on a fine bridge, and are immediately at Morgan City, an important center of the lumber trade; and thence through new landscapes of enormous cypress-swamps, of beautiful palmettos, of gigantic water lilies, the abode of snow-white cranes, turtles, of muscasins, and even of alligators. Bayou after bayou, with levees and canals and plumes, and again sugar-mills and plantations, orange-groves, fine gardens and ancient houses. At last the suburbs of the Crescent City are at hand, our train is transferred by the ferry to the opposite side of the Mississippi, and our overland journey is ended. In about five days we have traversed the continent, a distance of 2,500 miles, without change of train, have viewed the most varied scenery of four distinct climatic and topographic regions—the luxuriant growth of Southern California, with its beautiful settlements; the "Cactus State" of Arizona, with its dry plains and gorgeous mountains, joined by the high mesas and plateaus of New Mexico and extreme Western Texas; the blooming prairies of Western Texas proper, with its wonderful vegetation and its moist Atlantic climate; and at last, the magnificent scenery of Louisiana, with its bayous and forests and swamps. This is the route to be taken by the emigrant to reach our State, and a more interesting, agreeable, quick and direct route it would be difficult to imagine. Only about eight days (emigrant time) are required by rail, which is a great gain on the long and tedious transatlantic trip from New York or Baltimore via Chicago or St. Louis.

## OLIVE CULTURE.

A correspondent of the *Los Angeles Herald*, writing from Fresno county, asks the following questions: "If olive trees will grow in a very sandy soil, and if a little frost in winter will kill them? Will the olive grow where the orange will not, on account of the frost? Where can young trees be bought, and what would be the cost? Are they planted the same as peach and other fruit trees, and how long before they will bear?"

The *Herald* replies as follows: "Olive trees will grow in sandy soil or rocky land, or gravelly loam, or clayey loam of a stiff character, but do not thrive or bear well in damp soil. They bear more heavily on upland than low land that is often covered by fog. In the latter locality the black scale-bug is likely to infest the tree. The olive is more hardy than the orange, and grows where there are quite severe frosts. In such cases the trees should be protected by cornsalts, which permit a circulation of air and admit light, and at the same time they protect the leaves from frost. This, for the first year only. The trees are always for sale in Los Angeles, but they are more easily propagated by cuttings about two and a half feet in length. These are set in the earth in a hole made with a sharp iron bar to the depth of about twenty inches. After the cutting is placed in the hole, the latter should be filled with water, which fills the earth completely around the foot of the cutting. The hole is then to be filled up loosely, and a mound of earth piled up loosely around the cutting nearly to the top, and kept there the first year. It sometimes happens that the cutting will not grow the first year at all, but will start out the second year quite vigorously. The tree needs but little moisture where there are copious winter rains. In dry climates, about four times a year would be often enough to irrigate the olive plant. The trees do not bear transportation very well, and many of them die in consequence of removal; but the cutting is hardy, and is not troubled by gophers. If trees are planted, they will need several irrigations during the first summer. They are planted like other trees, but their roots are extremely sensitive and need special care while being transplanted from the nursery to the orchard. The tree bears usually in from five to seven years after planting from the cutting and in from four to six years from planted trees. In regard to the cost of the trees, the latter will be referred to unsparingly to respond. If the cuttings are large, the top should be protected by a coating of wax or clay to prevent being dried out by the sunbline. The tree will bear for two thousand years, or more, and the fruit is very profitable."

## SIERRA COUNTY MINES.

Mining in this county is in a very prosperous condition at present. The *Forest City Tribune* makes the following report of the Ruby mine: "After running the main tunnel 112 feet north, across the channel, a winze was sunk and gravel encountered at a depth of four feet. Ten carloads of dirt were taken out and washed that yielded one and three-quarters ounces of gold, or \$3 per load. Another lot of 17 carloads of gravel was then washed, and paid \$7 per load. Another winze was then sunk 50 feet further south on the channel, and 12 carloads of gravel taken out that yielded \$3 per load. An incline has been started on the channel this week, and it is expected to have the new ground sufficiently opened in a couple of weeks to permit of working quite a large force of men. There is every indication that the mine will yield handsomely in the near future." The property in which Mr. Frank Harland is interested lies next to the ground of the Ruby mine, and the ground is in all respects similar."

## THE FUTURE OF CALIFORNIA.

California, like a young giant bathing his feet in the Pacific, now no longer feels isolated since it is in close communication with the States east of the Rockies. The westward course of empire, and all that term implies, has been so rapidly settling up the immense tracts of territory between the Mississippi river and the Sierras, until now, wave like, it is beating hard against its Eastern confines. California is feeling the warm impulses of that westward growth. California, like Minerva, was born fully grown, but without the experience that characterizes the older and more successful and more substantial States. A quarter of a century ago, California reminded us of the fabled wonder of some glowing Oriental myth where cities spring up in a day from a golden soil. California has become it that great ocean, the long highway to the Indies, forming the last link in the belt of civilized enterprise which now cleaves the world, and across from whose shores American citizens can gaze upon the oldest civilizations.

California to-day has a great and glorious prospect before it. The State has of late years entered upon new conditions, perforce the result of passing through a transition period, aided by its new relative nearness to the "States" and its new peopling. As the star of empire shines for all, we are not sure but that California, with agriculture instead of gold, as the basis of future prosperity, with new and practical elements in its rapidly increasing population, instead of a code of laws that recognizes gambling as the chief industry, as was the case in its early days, with new and fresh aspirations permeating its society of all classes, with a general disposition to live for the future and a name, taking advantage of all its blessings—blessings that are resultant of phenomenal effects—gold, wheat and the grape being the tripodal factor of its future greatness, we are not sure that it may not be said of California—

"Lo! I uncover the land,  
Which I hid of old in the West,  
As the sculptor uncovers the statue  
When he has wrought his best."

California expects much from the completed Southern Pacific Railway, believing that it reaches the resident of the south of Europe with one hand and will lend him to Southern California with the other, and we hear that that Railroad Company are making extensive preparations to let the people of the wine-growing countries of Europe know precisely what they can do in this State. The European fruit-grower finds all his acquired knowledge useful in California, with a much more extended opportunity for its use.

No doubt California has been a sealed book in many people in the Atlantic States and in Europe. Ex-Senator David Davis, who has been visiting there, speaks in glowing terms of its climate, its hospitality of its people, and its vast agricultural, horticultural and timber resources, and says what he has seen there is a new revelation to be ever remembered.

We also learn that an organized effort is being made to attract the attention of the emigration towards California. Indeed, a comparatively large new population has been added to the State during the past six months, and the promoters of the scheme, coupled with the efforts of the Immigration Bureau of the State, now have every reason to expect augmentation of brawn and brain to the State right steadily from this time on. The cutting up of large ranches there into small farms at reasonable prices, the healthfulness of the climate, the certain market for its many productions, the new order of society there, and its nearness to the States by reason of the new and additional means of railroad communication, it seems to us are sufficient to make California a great commonwealth in the near future, as it is to-day the phenomenon of the country in its various products.—*Boston Commercial Traveler*.

## GROWTH OF LOS ANGELES COUNTY.

The *Herald* gives some figures showing the wonderful growth of this county during the last few years. It says: In 1872 the total value of all the property in the county was \$10,891,164, while in 1883 it was \$25,459,098, an increase of \$14,577,934 in eleven years. As late as 1878 there were but 5850 acres in vineyard, which has expanded within five years to 20,000. In 1872 only 1,243,990 gallons of wine and 15,900 gallons of brandy were manufactured, while in 1883 the figures had risen to 4,000,000 gallons of wine and 250,000 gallons of brandy. The 23 miles of railway in 1872 have grown to 173 miles, and the 43,540 bushels of corn grown have increased to about 1,500,000 bushels. While no wheat was found by the Assessor in 1873, he has assessed 2,000,000 bushels the current year. Fifty thousand bushels of beans are also reported. The number of orange trees has increased from 103,590 in 1878 to 526,640 in 1883. The *Herald* says: "We do not think that this comprehensive picture of growth of production can be surpassed in the history of the world in an equal period."

## OIL.

Last year the oil wells of the State yielded over 500,000 gallons of oil. The prospect is that this year the yield will be double that amount.

## SILK CULTURE.

Felix Gillet, of Nevada City, contributes to the *Continentalist's Guide* an article on silk culture in which he gives some valuable hints on the subject: An experience of fifteen years in California, where I have been growing and testing all the varieties of the mulberry known, and raising silkworms, a close study of everything pertaining to that industry, in fact, a thorough understanding of the whole business acquired by actual practice, may give me the right to speak as authoritatively as I do through this paper.

Silk culture may be regarded as a very delicate industry, well fitted to feminine fingers, to woman's tender cares; but, if it is a light and most interesting business, rendered so much more interesting through the wonderful changes of the precious insect, it is at the same time a business that requires most of our constant cares, and which must be understood pretty well, in all its complicated details, to enable us to arrive at a satisfactory result. To all who, in the expectation of increasing somewhat your little income, intend to invest or are investing in the silk business, planting mulberry trees, building cocoons, furnishing them with necessary apparatus, etc., I say: Go at it slow; feel your way first; do not plant too many trees for a start; plant them where they will not be in the way in case you change your mind and quit raising silkworms; plant them where they will be an ornament to your place; and, by the way, let me tell you that the mulberry makes a beautiful shade tree. Commence by raising but a few hundred worms; get acquainted with the latter's changes and moultings before raising a large number. Teach your children to attend to worms' wants, to pick leaves and feed the worms with the attention that so feeble and fragile insects have a right to expect from us. Always bear in mind that, if silk culture or the raising of silk worms is a light and pleasant occupation, it nevertheless requires the most minute and attentive care.

Plant none but large leaved kinds, and do not keep on your place more than half a dozen or so of the common *Morus alba*, a first-class variety for silk-worm feeding, but yielding a thin, small leaf, of slow and tedious picking—in a word unprofitable to keep. That leaf, which is very tender, will do first-rate during the first, or two first ages of the insect's life. Train your trees, (unless they are planted with a view to make shade trees of them), as dwarfs, or rather bush-like, branching out at eighteen inches from the ground, and prune them back only every other year; the trees so trained are large and of easy picking. Planting seedling white mulberry or common *Morus alba* trees is simply a waste of time and money; and you will find out to your dismay, that, while there is but a small profit in feeding silk-worms even with the large leaves, there is still less in feeding with the small leaf of the *Morus alba*. Feed the worms with picked leaves, cut them before feeding from fine to coarse during the two first ages, serving them entire to the third age in spinning time, but do not feed with branches, a system condemned everywhere and practiced only by the lazy Turk, or recommended by inexperienced people who know nothing about silk-worm raising and the mulberry tree itself. So small are the profits in raising silk-worms, in the absence of a protective tariff, that, to make silk-worm raising pay something in California, we must by all means:—

- 1st—Render labor as light as possible.
- 2d—Make the trees yield the largest quantity of leaf.
- 3d—With a given amount of leaf, produce the largest quantity of silk.
- 4th—Plant none but large leaved kinds of mulberries.
- 5th—Raise none but yellow annual races from Europe.

## GRAPES—A CROP THAT YIELDS A PROFIT OF \$100 AN ACRE.

It is remarkable that there are not more and larger vineyards in the vicinity of Stockton than there are. There is no surer crop raised in California than grapes, nor any crop the market price of which is less variable. Nor is there a crop that is harvested and marketed at less expense. The price of Mission grapes this year is \$18 to \$19 a ton, and the yield in this vicinity year after year is from six to eight tons to the acre. T. A. Crawford, who is purchasing the product of many vineyards for a San Francisco firm, yesterday told of a man who sold his crop on eight acres on the vines for \$850. The whole cost of cultivating that crop was less than \$30. Nearly all the vineyards in this vicinity yield from eight to twelve tons to the acre, and there is a lively demand for the grapes. Agents secured the country, engaging the crop in advance. For foreign varieties of grapes, the price per ton in San Francisco has this year reached as high as \$51. The soil around Stockton is unsurpassed for grapes. The Lodi Brothers sold their crop, picked, at \$19-50 a ton. They are increasing their vineyard ten acres a year, and having excellent facilities for irrigation, they will bring their vines into bearing early. There is no surer road to riches than to plant vineyards, for whether the grapes are made into wine here, or shipped, they will make a paying crop every year.—*Stockton Herald*.







man Ref.























